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VOLUME 30

IN THE SUPERIOR COURT,

State of California, County of Sacramento.

OCTOBER SESSION, 1881.

HON. JACKSON TEMPLE, - - - - - PRESIDING JUDGE.

WINFIELD J. DAVIS, OFFICIAL REPORTER.

SAMUEL OSBOURNE AND WILLIAM M. CUTTER, REPORTERS.

The People of the State of California,
vs.
The Gold Run Ditch and Mining Co. }

COUNSEL:

For Plaintiff,

HON. A. L. HART, Attorney General, GEORGE CADWALADER, ISAAC S.
BELCHER, A. L. RHODES, RICHARD BAYNE.

For Defendant,

J. K. BYRNE, W. C. BELCHER, S. M. WILSON, W. T. WALLACE, A. B.
DIBBLE, A. P. CATLIN.

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In the ³⁰ Superior Court
of the State of California
in and for the County of
Sacramento

The People of the State of California	} Afternoon Session Wednesday Jan'y 4 th 1882
vs. The Gold Run Ditch and Mining Company	

Transcript of Testimony
Vol.

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Niles Searls

direct

8477

cross

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Winifred J. Davis
Official Reporter

Afternoon Session

Testimony of
Niles Searls

Called for Defendant

Sworn

Mr Byrne When did you
Come to California?

A In 49.

Q Where did you first live?

A For a short time in this
City.

Q For how long?

A I arrived in this City
On the 15th day of October
49, stayed here approxi-
mately a month, went to the
South Fork of the American
River above Mormon Island
and mined about a month,
returned to this City about
the 15th to the 20th of Dec-
ember, remained here until
March, then went to the
Guba River and mined, and
Went to Nevada County, Nevada
City, the first of September 50

That has been my home since.

Q In what County were your mining operations on the South Fork Carried on?

A About two miles above Mormon Island and in what must now be the limits of Eldorado County I should think; at least it was just in the borders of Eldorado. It might be within the limits of this County but I should think in Eldorado.

Q And in what County were your mining operations on the Guba River

A In Guba County at Long Bar

Q Were you in Sacramento during what is known as the flood of 49-50?

A I was.

Q State to the Court what you then saw with reference to the height of the water and inundation

of the City ?

A I saw the City inundated to a depth varying from two to ten or twelve feet, The surface of the earth being irregular the water was of course deeper at some points than at others. It first came in from the American River, That River rising earlier than the Sacramento. The water receded a little, then the rise of the Sacramento came down and it rose again. It receded the second time somewhat, when additional rains falling and it coming on a little warmer it rose a third time and finally receded gradually. The City or portions of it were inundated for say a month more or less; I do not recollect the precise time. The water on the block say two or three blocks from here, between 4th and 5th, I and J

Streets, was six feet deep.
 At the Junction of second
 Street or K it was some
 ten to twelve feet as I remem-
 ber it now! I think ten feet
 deep at any rate. On the block
 bounded by L & M 3^d and 4th
 Streets, which was a low one,
 it was at points fully 12
 feet deep.

Q Was the entire City under
 water at that time

Ans Badwallader Where was the
 last place.

A The block bounded by L
 M, 3^d and 4th Streets I think
 it is. If I am mistaken at
 all, it is as to where the
 house stood, I boarded in
 the, lived in the upper part
 of it part of the time. It
 is possible it was between
 second and third but I
 think not. I am very sure
 I used to go through 4th
 Street and down L. I
 passed Rollin & Neavitts Store
 On the Corner of 4th and K

Street, as I remember! I used to go pass there shop to L and then down on the next block below that I think it was. It was a house where I boarded — kept by Samuel Rich whose son lives out on the upper Stockton Road. If I am mistaken as to the precise spot it can be verified. No doubt, the block was a low one.

Mr Byrne Was the entire City under water at that time?

A The entire City was under water except perhaps a point here where I suppose the Plaza is, what we called the Island I never saw under water. I saw it very nearly all under, but not all of it. At all times when I saw it there was some of it out of water.

Q How do you account for that elevation at that

particular place? was it
Natural or Artificial?

A It was Called an Indian
Mound. But I only know
that it was so Called. I
do not Call to mind now,
at this distant period,
having observed myself any-
thing to indicate.

Q How high was that above
the ordinary level of the
City surrounding it?

A It must have been, above
the points where the water
was six feet deep, eight
feet, but probably not eight
feet above —

Mr Cadwallader (Interrupting)
That is simply a sum in
Arithmetic

Witness It was not eight
feet higher than J Street
opposite it. It was probably
four or five feet higher. It was
a rise as I remember it, of
say four or five feet higher
than the ground contiguous
to it.

Mr Byrne How far back from the City front was the plain upon which the City stands inundated at that time ?

A It was inundated to the Slough just this side of Sutters Fort I passed in a boat and spent a part of the time at Sutters Fort which was out of water.

That Slough this side of it is I think called Burns Slough; it is the one immediately at the Fort. I passed and repassed repeatedly in a boat from here to Sutters Fort.

Q State the Area of this Island which was out of water at the time you speak of - about ?

A I should say the smallest Area which I saw out of water was 100 feet square an Area of 10,000 Square feet say.

Q How far up and down the

Valley, if you know, did this flood extend?

A It extended as far as I either went or could see. Just at the time of the flood I was not at the River, But very soon thereafter I went to Marysville. It extended all the way up to Marysville. The water having receded - it had receded so that we could pass through the streets before I left - and when I got up there Guba City was out of water. Marysville was also out of water when I arrived there, Or Nyes Ranch we called it then. The town had been organized but we called it Nyes Ranch very frequently.

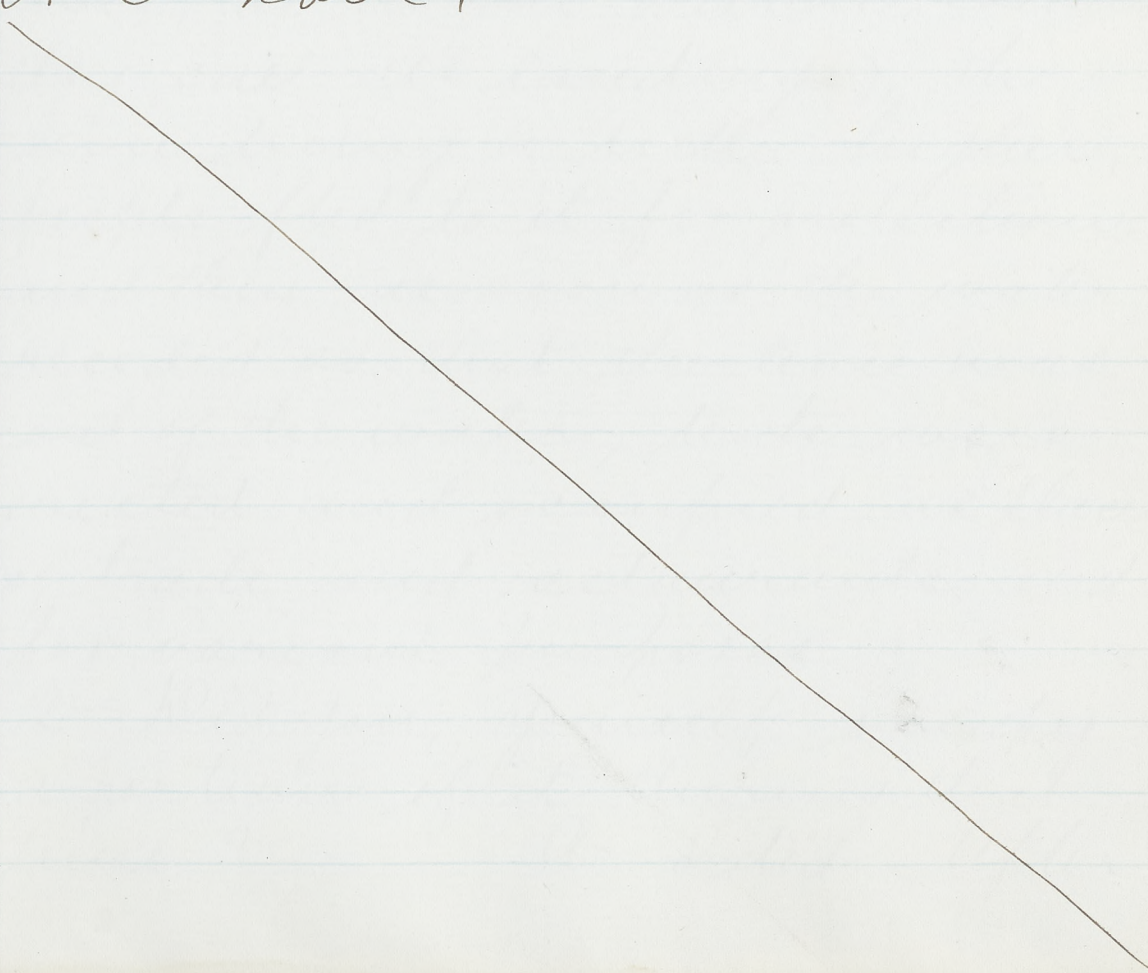
Q The site of the present City of Marysville?

A Yes

Q To what extent did it extend on either or both sides of the River

A As far as you could see with the naked eye; as far as you could see the Earth, It looked as though it extended to the foot hills But I know from observations made at other times when it looked similarly, that it did not do any such thing.

Q Have you observed this picture which hangs on the wall, representing the Condition of the City of Sacramento during that flood?
A I have.



Q- What do you say as to its accuracy or its general accuracy?

A- I say its is a fair representation of Sacramento City as it then appeared.

Q- How is it about those tents upon the water front that appear upon that picture? Were they there?

A- Tents were placed there after the water receded a little. In the first place when the water rose the levee, as we called it, (though not an artificial levee then we still called it the levee, as in the Western country they call all landings), the levee being a little higher, people fled to it for protection, and then as soon as the water receded so that the levee was out of the water, tents were erected and occupied as places of trade and restaurants and for various purposes.

Q- Did you, yourself occupy a portion of it during that time?

A- I did. After

the water receded so that it was out of water. I rented a little piece of a tent, which was built upon some lumber, some scantling, laid up bob-house fashion, two feet high perhaps, and then a tent on top of it. I was a potato merchant, was trading in potatoes between San Francisco and here, and I rented that to land my potatoes on, and sold them to people who came down from above; potatoes and onions.

Q. That was your warehouse at that time? A. Yes. And I moved them from there to J. B. Starr and Co's, who were diagonally across from me and they sold for me at auction more or less.

Q. When you were here in '49 did you observe any marks of previous floods which had been higher than even that of '49-'50, in the trees or elsewhere where such marks could be

distinguished? A- No. I do not know that I can say that I did. I had my attention called to what purported to be marks but I am not prepared to say that I saw anything that satisfied me from ocular demonstration that it was a mark.

Q- Will you state what those were and then the court can judge?

Mr. Cadwalader - We object to that.

Mr. Byrne I do not think it objectionable at all. I think it is permissible for us to show what he saw.

The court - But the witness said he saw nothing to indicate a former flood.

Mr. Byrne Saw nothing that convinced him.

Mr. Cadwalader - Nothing that satisfied him. You can not get in a man's conjectures.

Mr. Byrne I am not asking for his conjectures. I am

asking for his knowledge of the facts.

You state that from Sacramento you went first upon the Yuba River I believe?

A- The Yuba River, Well I prospected in different place but settled down and went to mining in earnest at Long Bar on the Yuba River.

Q- And from there you went to Nevada City where you have ever since resided?

A- Yes. Ever since.

Q- What offices have you held in the County of Nevada, naming the first one and following along?

A- The first office I held was that of Alderman of Nevada City. The next was District Attorney of Nevada County. The next was District Judge of the 14th District, embracing Nevada, Sierra and Plumas Counties, during a portion of my incumbency. Then Plumas

was cut off. Subsequently I was State Senator and Drainage Commissioner.

Q- Last but not least?

A- That closed me out.

Q- How long were you District Judge of the 14th Judicial District, and between what years?

A- I was District Judge from '55 until January 1st '62, a period of between six and seven years. Or in other words I served something over a term of six years.

Q- What was the principal or main character of the litigation that was conducted before you when you were District Judge, of that district.

A- The bulk of it was mining litigation.

Mr. Caldwell - I do not suppose that is relevant. Let counsel produce the records of the Court.

The court - I do not see the relevancy of this at this moment.

Mr. Byrne Its relevancy will be quite apparent I think after I have asked two more questions, perhaps one.

What district you say embraced the counties of Nevada, Sierra and Plumas?

A- Yes, during part of my term.

Q- And during your entire term, what counties?

A- Plumas was cut off during my term, and just before it closed, as I recollect now, Sierra was cut off; so that for one year I had Nevada County alone; I think it was one year.

Q- Will you again tell me between what years you were District Judge? I have forgotten?

A- From '55 to '62.

Q- During those years what was the principal business or industry carried and conducted in those

counties? A- Mining.

Q- What was the character of the principal litigation, which occurred in those counties and of which you as Judge took cognizance?

A- It was what we called mining litigation, involving a construction of the rights of Miners and ditch owners and the numerous questions growing out of the ownership of that class of property.

Q- During that time or since, up to the present time, have you been interested in mining operations?

A- I have to some extent.

Q- Do you know whether or not any custom or practice or usage has, since you have been a resident of Nevada County, prevailed in that and the counties which you have named, with reference to the use of water for washing mines, the discharge of

the tailings and water from those mines into ravines, and matters connected with that particular industry?

Mr. Hart That is objectionable upon two grounds; first, that it is leading and suggestive. Second, that the use of the term "usage and custom" is calling for a legal conclusion, and the testimony would not be competent; it is substituting the opinion of the witness as to what amounts to a custom for the judgement of the court.

After argument pro and con, Mr. Byrne changed the form of the question to the following:

Q- In the Counties of Eldorado, Yuba, Nevada, Sierra and Plumas where you have lived and observed the operation of the miners, what has been the practice or usage or habit rather, of

miners with reference to the
disposition of water and
tailings from their mines?

Mr. Hart - You withdraw the
word usage?

Mr. Byrne Yes. I withdraw
it.

A. The bill has been

A. The habit has been to wash and separate the gold from the earthy matter by the use of water and after having done so to throw the water with the debris into the most convenient ravine, cañon or stream leaving it to find its way where ever the elements might conduct it.

2. To what extent has that habit prevailed - that practice prevailed throughout the State of California to your knowledge.

A. In the Counties of Placer, Nevada, Sierra and Plumas it has been universal except in a few isolated cases that I have known where the miners believing the debris would be valuable for re-washing have corralled it as the term it by at appropriate dumping places and preserve it to rewash it. In other words they have not abandoned it - and as they term it they hold on to it, either by building

artificial dam, or brush or log structures to hold it. Those cases have been very rare, and I will add one further exception that I have seen recently - very recently though. Mr. O'Brien has been —

Mr. Cadwalader Don't get too far away from the question in one answer

Mr. Byrne. This is certainly in response to my question

Witness (cont'g) The practice has been universal, so far as my observation has extended, except in those cases which I have mentioned, where they want to preserve the tailings & rewash them

2. When the tailings had been preserved in the manner in which you speak and were afterwards reworked what then became of them?

A They could then be turned loose as I have stated. That has been the general practice

2. How long to your knowledge has that practice prevailed in California?

A Since 1849 - Since November 1849 when I first observed mining, and up to this time.

2 Over how much of the mining region of the State have you been from time to time? A I have been over the mining region from Amador County to Siskiyou but not frequently. My attention has been mainly directed to the few counties that I have mentioned - Placer, Nevada, Sierra and Plumas. Butte County I have frequently been in but not to be there constantly.

2 To what extent have you observed similar operations in the other counties of the State besides those that you have particularly noticed it in. I have always observed it whenever I passed through these Counties without exception.

Have passed through Butte County occasionally, not very frequently. I have been in Eldorado County occasionally but not very frequently. Have been in Shasta County Trinity and Siskiyou and perhaps another County; that existed in earlier days in that Section of the Country, but I was never through those Northern Counties but once.

2 State your observation of the Exercise of this Practice or usage in those Counties that you have just mentioned?

a. It has been universal - the practice

2 To what extent has it been acquiesced in by the people in those various Counties?

a. I do not call to mind more than 2 or 3 cases that I have ever known when an objection has been made to it, out of perhaps thousands that I have been acquainted with where the practice

Existed, and during all of the 30 years and upward - I do not call to mind but 2 or 3 cases where it was ever questioned

2 How has it been where the Exercise of this privilege or practice, has resulted in injury to inferior proprietors? Persons owning the Claim further down the Stream or Canon? A. As a consequence?

Mr. Hart. We will take an objection to that question on the ground that it is irrelevant, immaterial and incompetent

Mr. Byrne We will withdraw that question. I will ask you if there is any other way in which these mine ores have been or can be worked except by the Exercise of this privilege of which you have spoken?

A Some of the mines in earlier days - the surface mine ores have been

worked and the material and refuse have been confined perhaps at a very rate temporarily. Late years there has been no other possible method in most cases by which the mine could be worked than that which has been followed, and is not today. The unimportant mines of the country so far as I am acquainted with them —

Mr. Cadwalader (Intg) You have answered the question. The virtues I was going to say ~~that~~ ^{with} there and there are exceptions, could not be worked except in the manner I have mentioned, of turning the debris loose in the canyons and ravines.

2. Can gold mining operations be conducted or carried on in any other way excepting by the use of water?

A They can not.

2. Jacobus & Ext are you familiar with the appropriation of water for mining

purposes and its diversion from the Streams of the Country by means of ditches and the conduct of it to distant points for that purpose?

A. To what extent are I familiar with it, do you ask?

2 Yes, what is your knowledge?

Mr. Cadwalader We do not see any relevancy to that

Mr. Byrne We think it is quite relevant. We propose to show by the witness, the manner in which water is and has been appropriated for mining purposes and diverted from the streams.

The Court. In the way of showing the amount of money invested in Mining Enterprises?

Mr. Byrne. That is part and also as a foundation for other questions.

Mr. Cadwalader I will show the magnitude of the interests. I suppose under Your Honor's rulings they are permitted to show that

The Court. You can ask the question.

The Reporter read the question Mr. Byrne. What is your knowledge on that subject.

A I am familiar with the subject. My knowledge extends to knowing to what extent the streams have been utilized and the water appropriated through ditches in the County in which I live and some of the adjoining Counties. I know every stream in most of those Counties and am acquainted with all or nearly all of the ditches. I have been in the employ of those Companies more or less, and have been over the ditches.

2. Will you name some of the principal aqueducts or ditches in the County of Nevada with which you are familiar?

A The Rock Creek ditch leading from Rock Creek to the vicinity of Nevada City, that being one of the first constructed

in the County. The South Yuba Ditch extending from the South Yuba River to a point above the head of Bear River taking water to Placer County and also to Nevada County. The Clear Lake Ditch and its tributaries taking the water from the lakes at the head of Cañon Creek and from the Middle Yuba River. The Bloomfield Ditch taking the water from Cañon Creek and its tributaries and contiguous lakes. The North Bloomfield in Nevada County. The Milton ditch taking water from the head water, tributaries and lakes adjacent to the Middle Yuba River, conveying it down through the County to French Corral, in Nevada County, and perhaps 100 other small ditches which I cannot mention in that County.

I know what extent if at all are the waters conveyed by these ditches, stored

or conserved in reservoir during the summer season or during the winter season we will say "2."

A These Companies all those I have mentioned except the one I first mentioned — The Rock Creek, all these Companies have in the mountains large reservoirs in which they store the water of winter and early spring for use during the summer or dry months, and most of the water that we use during the dry portion of the year are those that are drawn from their reservoirs at the heads or near the heads of their ditches.

2. What effect if any does the conservation of these water in the reservoirs have upon the winter floods, or the floods which would occur if there were no reservoirs?

A Decrease them —

8504 The Cont. I suppose we know as much as the witness does about that —

Mr Byrne Q. I will ask you then to describe the extent and character of these large reservoirs?

Mr Hart I object to the question as irrelevant and immaterial. The fact that they held back the waters there in the winter time would be no defense to this action in which we complain of their putting their debris into the streams and reducing the carrying capacity of the rivers. The only effect this will have will be to lengthen the case it seems to me.

Mr Byrne Among their grounds of complaint it is charged that we cause the lands of private owners on the banks of the American and Sacramento Rivers to be inundated and overflowed. If we show,

that in the course of our mining operations we restrain the water which otherwise would come here and do injury it seems to me it is a pertinent fact. It certainly tends to show that we are not doing the damage of which they complain and that if any damage at all results it is less than it would be if mining operations were not carried on in the State. I propose to show in addition the fact that the waters are restrained at a time when their presence here would be most injurious. We propose to show in addition that when the water is low the discharge of the water from these reservoirs materially increases the quantity

of water in the river here and adds to its navigability. We propose also to prove that this water is liberated at the time of ~~high~~^{low} water and we intend to show all the expense of constructing these works and that they are necessary adjuncts to the mines and part of the mining properties. We propose to show also that the low water mark has been raised by the liberating of these waters in the reservoirs and not by the raising of the bed of the river.

The Court I think you may state their storage capacity.

Mr Byrne then your Honor permits the question The Court for that purpose showing the storage capacity.

Mr Byrne A description of the extent would describe that - the extent and character of these reservoirs will give the Court a better idea than could be done in any other way.

Mr Badwalader live except to the ruling of the Court.

Ex

The Witness In regard to that question, I could only answer it in this wise: those Ditch Companies have each of them, those that I have mentioned particularly have each of them one or more storage reservoirs. Some of them have a large number of them. The larger ones - they varied in size, as a matter of course would approximate I would say from 2 to 4 miles in length by

2008

from half a mile to a mile in width

Mrbadwalader Q They are lakes are they not?

A They are reservoirs. Some of them were originally small lakes at the outlets of which dams have been constructed. Their depth vary from nothing, you might say, to 75 or 100 feet. I could not give the number of cubic yards or gallons or the quantity of water contained in them except to give that general definition of their sizes.

The Court What did you say their depth was?

A Their depth is from nothing to 100 feet deep. They ordinarily average, I think I am justified in saying 20 or 30 feet deep — that is my judgment. I have all the figures of these

large reservoir in my
 office at home and I
 could tell precisely
 but my judgment would
 be that the general
 depth of the North
 Bloomfield Company's
 reservoir is say 50 or 60
 feet with the greater
 depth at the dam and
 the lesser depth at the
 reservoir but Mr Smith
 could no doubt give you
 the precise depth and
 he probably has. I could
 only approximate it. I
 should say that reservoir
 was ~~4~~ miles long, but
 I could only approximate
 it and I give you my
 recollection from passing
 and re-passing it very
 frequently, boating in
 it and fishing in it
 and all that sort of
 thing. I have been to
 all of these reservoirs
 frequently but I have

no data here by which I can give them precise dimensions

Mr Byrnes At what time of the year are those waters discharged from the Reservoirs? During the Summer or dry Season when the waters of the streams fail - the streams and the small ravines and the streams which are tributary to these ditches - when that fails then they draw from the reservoirs and that furnishes them a supply during the dry Season of the year

What effect does that have upon the quantity of water in the Yuba River and the Sacramento River below the mouth of the Yuba?

A The quantity of water turned into the Yuba river during the

dry Season from the Excelsior Company, the South Yuba Company, the North Bloomfield Company, the Milton Company and the Eureka Lake Company at least double the quantity of water in the main Yuba river. I know that from this circumstance: in 1880 we were constructing a dam across the Yuba river and when it had approached completion except say 100 feet and we were desirous of closing the gap it became important to reduce the quantity of water in the river as far as possible. I was one of the drainage directors. We telegraphed to those Companies except the Excelsior — Mr O'Brien was President and I saw him — we requested them

all to shut off the water
 They did so and it de-
 creased the altitude of
 the water in the Yuba
 river one half. It de-
 creased the quantity
 more than one half
 I assume because the ve-
 locity would be naturally
 retarded by decreasing
 the depth. It decreased
 the depth of the water
 one half. It was off for
 several days while
 the gap in the dam
 was being closed and
 then it was turned on
 and the water immediately
 rose. At that time the
 Companies in Pierre
 County were not requested
 to shut off their water
 and I have no knowledge
 that they did so
 Observe you describe
 to the Court what quantity
 of water is that is thus
 furnished by these

various rivers?

A In miners inches?

Q During the Dry Season, ^{yes} in miners' inches? A Perhaps 20,000 inches - those Companies that I have mentioned

Q Could you give us an idea about the width and depth of the Yuba River? A At the time I speak of it was confined to a space of 100 feet wide approximately and the depth of the water was about 5 feet - 6 feet I think I may say. It reduced it to about 3 feet in depth, or in other words it was a volume 3 feet deep as near as I could judge by 100 feet in width, flowing with a rapid current

Q That is the volume of the water that came

from those ditches and reservoirs?

Ayes it was a volume sufficient if confined in a canal to have carried a small up-river Steamboat. That is to say, any Steamboat that runs in above here could have run through our gap.

Q Judge Pearl's, as compared with the quantity of material which is now being discharged from the mines — I mean comparing the present quantity with that which was worked in the earlier history of mining pay from 1849 to 1860 and 1861. A My judgement would be that from 1850 on up to 1865 the quantity of material thrown into the streams Bear River and the Gubas was larger than it has been since that time.

Q How do you account for that?

A There were more men mining and they were using the water. There was not as much water used then perhaps as there is now but they were using the water over and over again. They were making it do double treble and quadruple service. The mines were shallow. A mining Company would use the water with a little short sluice and they dumped it at the end of the sluice and it would be picked up by another Company just a little below them and used over again and this would go on in some instances a dozen times before it found its way into the stream. Later while some additional water has been appropriated above a good deal of additional

Water- Those Claims that used the smaller streams about Nevada City and through that belt; the Surface Claims have been worked out and the water that was taken there had not sufficient head as they term it, was not high enough to afford the pressure and in some instances it is not used at all except as it is taken up below by the Excelsior Company and they to some extent I think use it once. The water that is brought from above is in no instance that I can call to mind except one or two ever used but once. One of the instances is the water of the North Bloomfield and Eureka Lake. A part of the South Yuba water is taken up by the Excelsior and they also take up some of the water of Deer Creek which

is scarcely used at all and the water of these smaller streams which was largely used at the outset has been so little used of late that new ditches have been located in place of the old ones that were abandoned and the water brought into Nevada City. One of the hydraulic mines now being worked at Nevada City is being worked solely by the new ditch that was constructed a year or so ago and water is used that had been formerly used perhaps a dozen or 15 times from Deer Creek before it was abandoned, by working out the surface claims and it was abandoned and it has recently been appropriated and a ditch constructed to take it in. I think taking it all in all there was more material worked during the earlier years than there is now.

2- What was the relative difference in the number of persons actually engaged in mining during those years say from 1850 to 1865?

A- It was immensely larger. I know known Nevada City from 1850 up to 1860, perhaps later than 1860, there was probably in an area having a diameter of three miles having one hundred companies to work and to day within those same limits there are two companies at work, one of them only using water of Deer Creek and the other one only uses the surplus water of the Cauteyaba Company and works but a few months in each year.

2- Do you now speak of hydraulic mining companies? A- I do.

2- Do you about how many men were engaged in the business of mining in the County of Nevada say

from the year 1850 to the year
1865?

Mr. Hart We object to that
as irrelevant and immaterial
The Court We have got a good
of such testimony in.

Mr. Hart I suppose that can
hardly be addressed to the
judgment of the Court, if
there were ten thousand men
in there, that would be no
defense.

The Court It goes to show
that there are not nearly
so many now.

Mr. Byrne We propose to
account for this large a-
mount of material, that
came into the river at
that time and prior to 1875
by showing the number of men
that were working and the
character of the material
compared with the character
of the material that has been
washed now.

Mr. Hart I wish draw the
objection

A I could only answer that
 question in this wise; the popu-
 lation of Nevada County during that
 period was say 20,000. The entire
 population almost was there
 engaged in mining or in
 pursuits connected with mining.
 It was a mining County, the
 only important industry of
 the County was mining.
Mr Cadwallader I object to
 that as not being an answer
 to the question because he
 at once gets us into the
 domain of how many persons
 were indirectly in mining
 it has nothing to do with
 the question and I move
 to strike out that much
 of his answer where he
 speaks of persons indirectly
 engaged in mining as not
 responsive to the question.
 A It would be impossible
 to say with any precision
 just how many men were
 engaged in operating the
 mines, probably over one half

of all the Adult Males of the County during that period were actually engaged in mining. During the winter of 1850 - 51 there was a population of 20,000 people estimated and I think the estimate was not too large, about Nevada City in an area of about three miles of which I have spoken except perhaps 2,000 men in the City engaged in other pursuits, and 2,000 more who were surplus - gamblers and all sorts of men lawyers included - the population was all engaged in mining.

The Court That is 4,000
out of the 20,000

A Yes sir I think it is safe to say that 15,000 men at that time during that winter were engaged in mining about Nevada City and in that area of three miles diameter

Mr Byrne How many in other portions of the County at that time?

A I was not during that winter much over the County but in the outline portions of the County during the winter they were not mining largely, they would leave the mining claims above, or did at that time and come to the vicinity of Nevada and mine, so that while the population of the County was that winter probably larger than it has ever has been before or since, I could only approximate in a very distant and indefinite way the number in the different localities =

Mr Cadwallader I move to strike that out =

The Witness I stated or aimed to state that I could not tell; that I was not much over the County and my judgement

in regard to it would be worth nothing I think

Mr Byrne How many persons are now engaged in hydraulic mining in the same territory that you have described?

A Not exceeding 100

Mr Cadwallader In Nevada township

A No Sir an area having a diameter of three miles with the Court House of Nevada City as its Centre. It embraced a part of Nevada township, not all of it and it embraced a little of Grass Valley township.

Mr Byrne How was it in Sierra County during that same time?

A The mining population of Sierra County at that time but in the winter at that time the mining in Sierra County was more completely confined to the Rivers and in the winter

There was not so much mining, In the summer the mining population was large but I could not say with any certainty as to these number; Several thousand men in Sierra County were certainly engaged in mining in the month of September 1850 when I left the County for the last time that winter

○ How as to the County of Plumas

A There was but little mining at that time in Plumas County except on Feather River. River mining mainly in Plumas County at that time or what is now Plumas County. It was not organized until a later period than that

Q How as to Yuba County?

A Yuba County there was a good deal of mining on the streams mainly and bank diggings and hills adjacent to the streams.

Q How about Placer County?

A Placer County the population was very large, about Auburn there was a great deal of mining a very large number of men engaged in that pursuit, some thousands.

Q What was the Character of the Material that they then washed away as compared with the gravel which remains in the hydraulic mines yet to be washed.

A It was lighter, it was surface gravel or taken from near the surface the material was much lighter than that which is obtained from the deep channels, a great deal of earthy matter on the surface was washed

off hundreds and thousands of acres where during the first few years of mining the surface was washed off into the streams and more or less mixed with vegetable matter and lighter material than that which comes from the deeper channels.

Q Will you describe that which comes from the deeper channels?

A It varies somewhat but what we call the Blue lead the gravel is a heavy gravel and in most of places largely mixed with cobbles and boulders and is more or less cemented.

Q How does the gravel in the deep mines of Nevada County compare with that specimen before you as to hardness?

A That is a good specimen of it. You find acres of it. Mr Cadwallader I do not see the materiality of this testimony

Mr Byrne The Court has admitted the testimony and we have stated the purpose for which it is offered.

The Witness In many sections of Nevada County they have used mills to grind it up. Mr Cadwallader after argument we withdraw the objection. we will have no objection to Judge Searls making a short excursion into the question,

Mr Byrne Describe the Character of the material which remains in the hydraulic mines of Nevada County yet to be washed as compared with that that was washed away in former years?

A Nevada County has been pretty thoroughly prospected and the surface so far as it was known would pay has been pretty well worked off. The gold is now found

in paying quantities mainly only in deep channels so far as those have been opened so that their character can be determined, the material is harder coarser and denser than the surface material in which most of the mining of earlier years was conducted.

2- What is the population of Nevada County at present?

A- Approximately twenty-two thousand.

2- Upon what industry is that population dependant for its support?

A- Mining is the paramount industry, there are some other small ones, but the great business of the county is mining.

2- What is the character of the mining population so far as regards intelligence, morals and etc?

Mr. Cadwalader We object to that as wholly irrelevant.

The Court I do not see

the relevancy of the character of the population.

Mr. Byrne What in your judgment would be the effect of a total suspension of hydraulic mining in the County of Nevada?

Mr. Leadwalaader We object to that as calling for a conjecture - and a conjectural one

The Court - (After argument)
The objection to the evidence seems to me to be that he can not tell any further than he has told that it is the chief industry there and if that should stop the main dependence of the inhabitants would be gone. I will sustain the objection.

Mr. Byrne We will reserve an exception to Your Honor's ruling

Cross Examination of Niles Searls

Mr. Leadwelder Q. You have resided in Nevada City since 1850 have you not? A. Yes.

Q. You have either been a Judge or a Lawyer have you not all the time?

A. I have

Q. Your office has been at the same place all the time? A. My office has been in Nevada City all the time.

Q. Well about the same place is it not?

A. I have had my office in various places and buildings in town. For a good many years it has been where I am at present situated.

Q. You have practised law without intermission have you not, since

the time you were on the
Bench. And
except when absent from
the State, as I have been
a number of times

Q Nevada City is some
distance away from any
large hydraulic mining
is it not? — A There are
now but two hydraulic
mines in the immediate
vicinity of Nevada City

Q That was not what
I asked you, but whether
Nevada City was not quite
^{distance} away from any large
hydraulic mining?

A Nevada City is five
miles from — Q Please
answer my question yes
or no.

A It is five miles
away from an important
hydraulic centre. It
is from 15 to 20 miles
away from what I
would say are really
the most important of

the hydraulic mines of the County.

Q Mountains intervene do they not?

A Mountains?

Oyes. A No, Cañons. A Cañon intervenes between Nevada City and what we call the Ridge which is devoted exclusively almost to hydraulic mining.

Q I did not ask you about that.

Mr Dibble It is a direct answer to your question.

Mr Caldwell No, I did not ask any such question. I did not ask him to say what was the exclusive business on the Ridge. But I suppose that a lawyer has a right to be a bad witness.

Q What is the nearest mine to Nevada City, the nearest important mine? A There are two mines that might be

called of considerable importance within the limits; one of them within the Corporate limits, and the other I should think just outside the limits, half a mile away.

Q That was not what I asked you, you said a moment ago that the nearest important mine was five miles?

A The nearest important mining region.

Q Hydraulic mining region? A Hydraulic mining region.

Q What is that?

A Blue Tent. That is an important mining region.

Q What is the population of Nevada Township in Nevada County?

A It is either a little over 5000 or a little under. It approximates 5000. I think it is 5000 and a few hundred.

Q What is the population of Grass Valley township?

A I should think it was about 7000. The township you now speak of?

Oyes. Is there or has there been in Grass Valley township a hydraulic mine in operation in the last 5 years? Oyes.

Q What one? A I do not know the name of it. Just to the left of the narrow gauge Railway as you go from Nevada to Grass Valley, in the ridge that you cross, what we call Town Talk, there is one right there to the left which has been running.

Q You do not know the name of it? A I do not know the name of it - no.

Q That is the only one is it? A No.

Q What other one?

A They have mined at a place, I think it is called the Town Talk mine

Q Do you not know the place? A Yes, I know the place well and have tried lawsuits relating to claims there but I do not know the name of the mine.

Q It is not very important then is it?

A No. I judge not. It is not a large mine

Q Is that all?

A I do not call to mind - let me see -

Q Nobody else could call to mind could they?

A I think it probable there are some hydraulic mines on Wolf Creek there have been at various times but just at this time I am not sure whether there are or not.

Q Now Grass Valley township has 7000 population has it?

A Approximately

Q Nevada City or Nevada township has from 5000 to 6000? A Say 5000

Q Now you have mentioned two hydraulic mines in Nevada township? A Yes.

Q Are they large or small?

A They are not of the largest, not large ones

Q They are very small are they not?

A No, they are not very small

Q Where do they run their tailings?

A Into Deer Creek

Q They are very small are they not?

A No they are not very small

Q What are their names?

A One of them is ordinarily called the

Marcellus Mine and the other is called the Stirschman mine; the Manganita is a more common name for the Marcellus Mine

Q How much water do those mines use and how long in the year do they run?

A The Stirschman mine for two years past has only run on surface water of the South Yuba Company and ordinarily would not run more than three or four months in the year. The Manganita mine runs water from Deer Creek only. Last year they only ran in a ditch which they themselves constructed and which furnished ^{water}. I should think not more than 3 or 4 months.

Q All the stuff comes down into Deer Creek and runs in Deer Creek through Nevada City?

A It does

Q They send down a very small amount of stuff do they not?

A The Manzanita sends down a very considerable quantity. The Stirschman mine tails in below Nevada City and I am not so well acquainted with their dump below and have not observed it so very frequently. But judging from the number of men that they worked I should think that the Manzanita when running turns in more tailings than the Stirschman

Q But neither run more than three or four months in the year
Ans.

Q And those are the only mines that you have there?

A Oh no. There are a number of others

Q Well in operation?

A In operation

Q I am speaking of Nevada Township?

A Oh in Nevada Township there are a good many other mines

Q I am speaking of hydraulic mines in operation?

A In operation there are none others - that were in operation last Season none that I call mines

Q But for the last five years?

A Oh yes

Q Not since the Hayes Case?

A Yes Scott Flat, which must be in Nevada Township, which is six or seven miles up Deer Creek has quite a large mine

which has been running since the Key's case was tried. The Murchie mine has been running some not a great deal within the last few years. A man by the name of McCormack has a mine which tails into Little Deer Creek - no into Gold Run his tailings must come. That has been worked at intervals along during years past. But they are comparatively small mines.

Q They are all small mines? A All small mines - yes

Q Not known at all to fame? A No

Q And that is the condition of hydraulic mining in Nevada township with a population of between 5000 and 6000? A Yes

Q What is the population of Meadow Valley township? A You mean Meadow Lake township?

Q Yes. That embraces the town of Truckee does it not. A Yes. The population is not large. I should it would not be over 1500 or 2000.

Q Truckee has got more than that has it not?

A No I judge not. They are nearly all in Truckee. That is that is their home. They are wood men, wood choppers etc. Scattered around in the woods.

Q There is no hydraulic mining in that township is there? A None at present.

Q Never has been has there? A Oh yes.

A Where?

A All Truckee river

Q Do you say there

was a hydraulic mine
on the Truckee?

Alfred

Q When? A I do
not know when. There
is the evidence of it
there - the mines where
they have been worked
two miles up the Truckee
towards Tahoe. If you
ever passed up towards
Tahoe you have per-
haps observed them or
might

Q They are not in oper-
ation now are they?

A No I think not. I
have not known of their
being in operation for
10 years

Q Well why didn't you
say so? A I did

Q Now you have
7000 and 6000 which
is 13000. What do you
place the population of
Meadow Lake township
at? A I stated I judge

about 15 hundred

Q That makes 16000
out of your 22000?

A Yes

Q Now what is the
population of Rough
and Ready township?

A I should think 800
or 900, perhaps 1000

Q That is on the Southern
border of the County is
it not? A Yes. No! It
is on the Western border,
the West side of the
County

Q It runs from the Yuba
to Bear River? A Yes

Q What is the population
of that? A 800, perhaps
it may be more than
that but I should think
about that.

Q Now is there any
hydraulic mining there?

A Yes some, not a
great deal

Q Not a noticeable
mining is there? A No

In the vicinity of Rough and Ready there are some mines running at intervals. I saw them running and their ditches running down and supplying mines. It was originally a great mining region but it was surface mining and I think is mostly washed out.

Now where is the balance of your population? That makes 15,000. Where do the other 7,000 reside?

Upon what we call the Ridge and Little York township and Washington township.

Q Those are the other 7,000? Alpes.

Q Are they right on the Ridge? A No, neither Little York nor Washington are on the Ridge.

Q Now is any part of the population of Meadow Lake township engaged in hydraulic mining?

A Not at present that I know of. I think not.

Q Is any part of the population of Grass Valley township engaged in hydraulic mining?

A All small proportion only

Q Is any part of the population of Nevada township engaged in hydraulic mining?

A Yes.

Q What proportion?

A Let me stop a moment and answer you again. Rough and Ready township takes in an important mining camp way in the lower part

Q Just wait. I have not asked you that.

A But you have asked me the question and I

have made a mistake.
 Let me correct myself
 I will go back to
 Rough and Ready in a
 few moments

A I will say here, with
 the permission of the
 Court that it did not
 occurred to me that
 Mooney Flat does lie
 in Rough and Ready
 township. That is in
 the Southern part of
 the County and is an
 important mining camp
 I made a mistake in
 my first statement.

I do not ask that
Mr Wilson be ask that
 the witness may be
 permitted to answer
 what he desires to say

The Court stand we
 any correction to make?

A The only correction
 is that in estimating
 Rough and Ready I
 left out Mooney Flat;

both in estimating the population and also taking into account the mining in Rough and Ready township. Mooney Flat is a mining camp. exclusively devoted to hydraulic mining. The population is not large and I could not give it with any certainty but perhaps 100 or 200. The mines are quite extensive

Q Is the whole of Mooney Flat in Rough and Ready township?

A I understand the whole of Mooney Flat to be in Rough and Ready township. The township line is on the divide between Mooney Flat and Smartsville, as I understand it.

Q Now you stated the population of Rough and Ready township was

about 800 did you?

Alps I did

Q Have you not made a mistake there of 100 per cent? A I have already stated that in making my estimate I left out Mooney Flat

Q Well you said that had 100 population?

A I say I do not know with certainty the population but I judge 100 or 200

Q That would make 900 or 1000 would it not?

A If it is 200 it makes 1000

Q I will ask you if the population of Rough and Ready township is not 1600?

A I should think not.

My judgment is that the whole township would not exceed 1000

Q It is 1565 on this map here

Q What is the date of that? A 1880. This is a map of Nevada County, California compiled from the latest authentic sources, showing the mines, the valuation, the population etc. by J. D. Startwell County Surveyor

A That may be taken from the official Census. I do not know. If it is it certainly is more likely to be correct than I am. Or it may be only an approximation by Startwell. I think the map was gotten up before the Census was taken of 1880

Q What is the population of Nevada County?

A According to the Census of 1880 it was 20 000 or even. We estimate the population at 22 000

Q What part of that

is Chinese? Alwell at
a guess I would say
1000, perhaps more per
haps less

Q Is it not 3000?

A I think not. The
Chinese population of
Nevada County is not
large

Q Has it not always
been about 3000?

A No. There was one
time when there was
a great deal more than
3000. There was a time
when the Chinese popula-
tion of Nevada County
was in my judgment
5000

Q Was not that popu-
lation in 1880, 2850?

A Do you mean the
result of the official
Census?

A Yes. A I do not
know what the Census
shows in regard to
that. My judgment is

The Chinese population in 1880 was somewhat larger than it is now. I think today it does not exceed 1000, and I do not believe it exceeded 1200 then.

Q What is the total value of property in the County?

A I cannot tell you.

Q What proportion of the total value of the property in the County is represented by mining claims? A By mining claims?

A Yes By mining claims and mining property.

A By mining property do you mean to include the ditches?

A No, you can look at this map if you want to in answering these questions?

A I should think the mining claims - do you

mean the mining claims?

Q All mining property?

A All mining property of the County?

Q Yes, what proportion of the total value of the property of the County is it?

A I would say one half but of course that is a matter I have not thought of

Q Is it not about 20 per cent? A The mining property?

O yes. A Oh it is infinitely larger, very much larger than that.

Q Is not the value of real estate and improvements in Nevada County twice or nearly twice the value of mining property? A We call mining property real estate. I suppose you mean the whole of the real estate other than mining property.

Q I mean real estate and improvements not being mining property? A Is it not greater?

2. Is it not twice as great?
A No. It is not half as great

2. I will ask you if, while mining claims and improvements are assessed at \$2,358.640 the value of real estate and improvements is not \$6,925.272

A I suppose by real estate and improvements you include mining claims?

I No, I do not. I exclude them. I exclude mining claims and improvements.

Mr. Byrne. Do you include ditches do you not?

Mr. Cadwalader I do not

Mr. Byrne. Are ditches separately stated on that map?

Mr. Cadwalader Yes sir

The witness The value? In speaking of the value of mining claims

Mr. Cadwalader (Intg) No. I am not asking you about that now, but whether the value of real estate and improvements - not being

mining property in Nevada County, is not nearly so much as mining property?

A. I answer no.

Q. Well, what is the difference?

A. I need not give you even an approximation. But I would say the difference would be —

Q. {Inty} Newer mine.

A. {Cmty} That mining property.

Q. {Inty} You can not even give me an approximation.

A. I can give you the proportion. I would say that mining property, excluding ditches, as compared with other real estate in Nevada County, would be $\frac{2}{3}$ of the whole. I would say that together, all the real estate, the mining property and the other real estate of the County, I would say that the mining property would represent $\frac{2}{3}$ of the whole.

Q. Is that a conjecture?

A. To some extent, it is. That is, it is my judgment as regards to it.

Q. Is it not a wild em-
jecting? A. No, I think
not. It is my judgment

Q. Is not the personal prop-
erty of Nevada County of ~~e-~~
qual value with the mining
property?

A. Probably if you could get
at it, the personal property
of Nevada County might be
even as large, but it is
very difficult to get at it;
the value of personal property.

Q. But I mean the value of
the personal property that the
Assessor has laid his hands
on? A. When I am
speaking of the value of
property, I am not speak-
ing of the value as put on
it by the Assessor

Q. I ask you to answer my
question. I will ask you
this: Whether the personal
property that the Assessor
has assessed is not just about
equal to the value of the
mining property with it

improvements?

A. I think it is somewhat less, but how much less I am unprepared to say. My recollection would be that it is less.

Q. The amount of the personal property assessed is how much? A. I do not recollect.

Q. It is about 2 1/4 millions, is it not? A. I should suppose it was less than that considerably; a good deal less I should think.

Q. I will ask you whether it is not a little more: 2,332,225?

A. I do not know.

Mr. Wilson. What is the question, as to what is the assessed value?

Cortness The assessed value?

Mr. Wilson Wait a moment.

I think the question Mr. Cadwalader - what is the assessed value?

Mr. Cadwalader No sir.

What I said was this: I was talking about the value of personal property that the Assessor had assessed. The witness said that undoubtedly the value of the personal property in Nevada, if it came to get at, was equal to the value of the mining property. I then asked him whether the value of the personal property which the Assessor had got at was equal to the value of the mining property. Mr. Wilson He has answered that

Mr. Cadwalader To what extent is stock raised in that County? A. Do you mean live stock?

I Yes? A. In the lower part of the County, Rough and Ready township - there is some stock.

I What do you call some?

A. I would call it - I could only speak of it in a comparative way - as

Compared with most of what we term Stock Countries, small I do not know the number of calves, goats, horses or any thing of that kind in the Country.

Q. Do you know anything about it?

A. Yes. I know that in passing the ranches there I see small bands of stock.

Q. Would you suppose there are as many as 7000 head of cattle?

A. Well, I would not be astonished at there being that many. I think my judgment would be less, but still I would not be astonished at that amount.

Q. What would you say to 40000 head of sheep?

A. I should say that would be very probable.

Q. What would you say to 5000 fruit trees?

A. I think it very likely.

Q. In the Country?

A. Yes. I would be surprised if it was not more.

I would expect it to be
larger

Q. How many Saw mills
have you in that County?

A. I do not know, a large
number, quite a large number

Q. A great many more Saw
mills than quartz mills are
there not? four times as many?

A. No, I would think not.
There are doubtless more,

Q. A good many more?

A. Yes, I think so. There
are a great many small Saw
mills scattered around every
where through the County.
Without stopping to think
them over, while I know
something of them, it would
take me some time to figure
them up.

Q. What would you put the
horses at which were in
Nevada County?

A. Put them at work if I
wanted to use them. The value
do you mean?

Q. No, the number, what

Would you put them at?

A I would not put them at anything. I do not know what the number is.

Q - Would you be surprised if there were 3000 in the County? A No. I would not be surprised if there were but a thousand and would not be surprised if there were 5000.

Q - The fact of it is you do not know much about it?

A No, I do not.

Q - All the industries are practiced in that County are they not?

A Yes. Well, of course all the industries are not. A large number of industries are practiced in the County.

Q - I will ask you whether all of them are not?

A No. I judge not. Manufacturing is an industry and except some very few mines we have no manufacturing. You may term

making lumber manufacturing perhaps. The manufacture of lumber in the County into a very few things. The industries of Nevada County are few in number compared with many communities embracing an equal population.

2. What is done at Truckee?

A Lumber is made, cords is cut, Sash Doors and Blinds are manufactured. There is a Sash Factory there, ~~as there~~ has been; I do not think it is running now; just below Truckee, Smelting Works, smelting ore. But the main industry of Truckee aside from the business brought there by the Railroad Co., it being a division station, is lumber making and working it up into the few forms, that are manufactured. That is the great industry.

2. Lake Bridgeport township, Washington township, Littlefork township and Bloomfield township

and state what proportion of the population of those townships are engaged in mining?

A. They are almost exclusively engaged in mining. There are merchants.

Q. That was not what I asked you?

A. What proportion?

Q. What proportion. Take Bridgeport township for the first?

A. I will answer it. In Bridgeport township the people are engaged either in mining or in those pursuits that minister to mining. The number, I will answer this my own way, of men who are engaged in other pursuits is less probably than in most portions of the County. But to say the exact proportion I cannot.

Q. You cannot tell?

A. No.

Q. You do not know whether it is $\frac{1}{2}$ $\frac{1}{4}$ or $\frac{1}{10}$?

A. No, I do not.

Q. Now take Washington Township?

A. Washington Township is a mining township.

Q. What proportion are engaged in mining?

A. I should say a larger proportion than in any other township in the County. They are almost all engaged in mining. It is so high up there is no ranching scarcely and the people are almost exclusively engaged in mining or in hotel keeping or boarding houses and that sort of thing. The proportion otherwise engaged than in mining is small.

Q. Now in regard to Bloomfield Township?

A. Bloomfield I should say was about the same as Bridgeport.

Q. Now in regard to Little York?

A. Little York? Much the same as Bridgeport.

Q. Every thing is carried on in those townships? They raise fruit there do they not?

A Yes, They raise fruit; not in all of them. Well, fruit is actually raised to some extent in all of them, too, but not to amount to anything. In Washington Township there is no fruit of any consequence. Right at the village of Washington which is down in a Cañon on the river, apples grow and grow very nicely, and they raise some peaches there. I recollect no other point in Washington Township where there is any fruit.

2. Have you any idea how many persons are engaged in mining in the Ridge, or where say take 1879 and 1880?

A I would estimate the population of the Ridge -

2 (Inty) I do not ask you that.

A I would estimate the population of the Ridge at 4000 and say $\frac{3}{4}$ of them are engaged in mining

2. You estimate the population of the Ridge?

a Yes, at 4000

2. Now tell me what townships are embraced in the Ridge

a. Bridgeport, Bloomfield, Cucka and I believe a part of Washington. I think Washington runs across the river yet I am not sure

2 Now, you say, Bridgeport, Bloomfield, and what?

a Cucka

2 How much of Bridgeport is in the Ridge?

a all of it

2 What part of Bloomfield?

a All of it

2 What part of Cucka?

a All of it

2. And what other township?

a I am not sure whether a part of Washington township is or not. Without looking at the map I could not at this moment tell

2 Just look at map and see?

a {Examining map} There is

a small portion of it.

Q. An insignificant portion is it not? A. Yes. The portion of Washington Township on the Ridge, as we term it, would not contain very much population?

I know much? 100?

A. Not more than 100 or 200; I should think perhaps not exceeding 100. There is a quartz mill or two in there, and when they are working - I do not remember whether just at this time they are working or not - it is likely the population would be considerably larger. But ordinarily I should think not more than 100 or 200.

Q. Now do you not know that according to that map there are not 4000 persons, all told, men women and children in those 4 townships or 3 townships and a fraction?

A. No, I do not know what that map shows. My judgment is that there are 4000

People on the Ridge.

2. I asked you the number Engaged in mining. You said there were 4000 Engaged in mining there? A. I say $\frac{3}{4}$ of them. When I say there are 4000 I do not mean to say there are 4000 adult men or that there are 3000 men Engaged in mining on the Ridge. I mean to say that the population is 4000 in my judgment and that $\frac{3}{4}$ of the people there are Engaged in ^{the} mining industry. I do not mean it is I nor to understand me that there are 3000 men there who are Engaged in mining by any means. And when I have spoken of all these townships, and spoken of the population and the proportion or number of them Engaged in mining, putting it at $\frac{1}{2}$, I mean one half of those who are Engaged in industrial pursuits - men

2 What do you mean in reply to my question, how many

Men were engaged in mining on the Ridge? What is it you want to say?

A. I said to you at the outset that I did not know.

Q. You do not know?

A. No. I think $\frac{3}{4}$ of all the men there are engaged in mining.

Q. But you do not know the number? A. No.

Q. That is your definite answer is it, that you do not know?

A. It certainly is: that I can only approximate it. I know, just as I know how many men there are in this room now. I do not know the number but still I could shut my eyes and approximate it.

Q. You do not travel over that country much in the winter, do you?

A. Over a portion of the Ridge unfortunately I do considerably. I go as far up as Columbia Hill frequently.

2. But I mean in the winter.

A. I go to Moores Flat in the winter but just as seldom as possible. Columbian Hill I go very frequently to in the winter.

2. What part of the year do those mines work on the Ridge?

A. They work more nearly the year round there, than any other else in the County.

2. That was not what I asked you.

A. If you had let me go on a little farther, I could have answered you farther. The Curcha Lake Company sometimes works the whole year, and some years only ten months. The Bloomfield Company works 9 or 10 months I should think and perhaps some years longer. The Melton Company I judge about the same. The smaller mining Companies, those who purchase water, usually do not work so long, because the Companies furnishing them very often use their water themselves and do

not furnish them the whole water season

Q. Now about what part of the year do they work on the Ridge?

A. Some of the Companies 10 months and some year the whole year. Other Companies 9 months; Still others not more than 6.

Q. The average comes be about 7 months I suppose?

A. The average I should think comes be for 9 months. The average I turned put at 9 months.

Q. Sometimes they are frozen up are they not? A. Yes.

Q. That makes the season necessarily very short, does it not? A. With the

Eureka Lake Company that is what shortens their season ordinarily.

Q. Shortens the Milton season too, does it not? A. Yes.

Q. And the North Bloomfield?

A. Yes.

Q. And the O'Brien mine at Smartsville?

A. I am not so familiar with that. They

do not freeze up I think. I think if they are shortened, it is for scarcity of water in the summer.

Q All those mines freeze up in winter, do they not?

A No. Not at Martinsville, I think. I did not say at Martinsville, but I mean all those mines on the Ridge above Deep Creek?

A. Some winter they do, other winter not at all.

Q. But generally?

A. In a majority of instances, when a snow storm comes, a heavy storm, the ditches will close, and will be closed 2 or 3 days and sometimes 10 days; and I have known instances where they were closed for 2 months.

Q. And for three months?

A I do not think I have known it — not of late years — where they have ever closed up three months.

Q. Take a winter like last winter where you had no rain until February, and had

very cold weather ?

A. A year ago this winter
 I. Yes ? A. Oh, we had
 water Early a year ago last winter
 I mean last winter ?

A. Now - this winter ?

I. No ?

A. A year ago ?

I. A year ago ?

A. A year ago they had water
 Early

I. During all this time you
 have stayed at Nevada City
 have you not ? During all these
 times you stayed at Nevada City ?

A. I make Nevada City my
 home. I go away a great deal
 unfortunately. I am away
 too much

Q- Will you have never been a miner?

A- Yes.

Q- When did you ever do any mining yourself? A- In the Fall of 1849 and in the Spring of 1850, to use a common expression.

Q- Since then you have been a lawyer? A- I was a lawyer then, that is theoretically, I had studied the profession.

Q- Practically you lived on a hill away from the water-courses?

A- Practically I lived in the valley near a water-course.

Q- Nevada City is in a valley near a water-course? A- Yes.

Q- Its elevation is what above the sea? A- Say twentyfive

hundred feet - varying a few feet

Q- And not forty five hundred feet? A- Not forty five hundred feet.

Q- You have snow there?

A- Snow falls sometimes.

Q- And very hard winters?

A- We have snow occasionally.

It does not usually lie on the ground but a few days at

Nevada City.

Q- When you were on the bench did you ever charge the jury that one miner had a right to deposit his debris upon another.

Mr Byrne objected to the question upon the ground that it was irrelevant.

The Witness {After Discussion}

I said that I had never known it to be questioned but two or three times. I will tell you what I charged the jury as nearly as I can now. I can give you the substance.

Mr. Byrne We will withdraw the objection.

A- I charged the jurors in substance that a man who located a mining claim had a right for the purpose of working it - had a right to work it in a reasonable manner and if a question arose as to whether his manner of working it had resulted in injuries to others, I left it to the jury to say whether the manner had been reasonable or not.

I charged the jurors that while a man had a right to use his own property in a reasonable way that in the absence of customs that use of one man's property which involve the destruction of another's ceased to be a reasonable use of it.

Q- In other words, you always adhered to the maxim "sic utere tuo ut alienam non laedas"

A- No Sir, I did not always

Q- Did you ever commit any infraction of that rule?

A- I permitted where a custom was pleaded— where it was pleaded I permitted it to be proven and where it was not I did not

Q- You held custom good then? Had you ever instruct your jurors according to the doctrine of Logau against Driscoll in the 16th California?

A- Yes, I tried Logau against Driscoll. It was tried before me.

Q- Here it appears the defendants contended that so long as —

Mr. Byrne { Int'g } We object to this it is irrelevant.

Mr. Leadwalaader This case of Logan against Horiscai was a Nevada County case.

Mr. Byrne What do you propose to show?

Mr. Leadwalaader I propose to show that this case was the law of that County.

The Court We are not inquiring however what the law is

Mr. Leadwalaader The question of the reasonableness of the use was never permitted to cut any figure in the case at all, and that the doctrine "enjoy your own property so as to not injure that of another" was always preserved.

The Court I did not suppose that the witness was to testify as to what the law is but as to the practice of miners.

Mr. Wilson I think it is indecorous to ask a Judge what he did in his official capacity and the opinions he

entertained as a judge. I object to this evidence myself as unwarranted by the policy of the law.

Mr. Leadmaler It appears from the Judge's answer that he charged juries in accordance with the decision in *Lagun vs Driscoll* in the 16th California.

The Court I do not know of any rule that makes the charge of a judge a privileged communication.

L. How in regard to Jones against Jackson in the 9th of California which also appears to have gone from your district?

A. Jones against Jackson is a water case is it not?

L. No Sir. It is a case relating to the dumping of material and the Syllabus says; "When a place of deposit for tailings is necessary for the working of a mine, there can be no doubt of the miners right to appropriate such ground as may be necessary for this purpose; provided he does not

interfere with preexisting rights"
Mr. Wilson I object to that
 question it is irrelevant and
 immaterial

The Court If you mean to
 ask him if that is the law there
 is no point to the question.

Q - You were on the bench
 in 1854 were you not?

A - Yes.

Mr. Leadwelder This case
 seems to have been decided
 in that year in his district

The Witness I remember
 several cases. I do not think
 of the one you mention at this
 moment. I remember several
 cases one of which involved
 the right to tailings which had
 been placed on certain grounds
 and another that involved a
 right to place tailings on the
 mining claim of another
 but I am not sure that either
 was this case.

Q - Are you familiar with
 the case of Keel against Smith
 in the 27th California where

it was held -

Mr. Belcher We have interposed objections to this testimony and I do not think the court has ruled on them. I do not think it is proper to catechise the witness on all the cases decided by the Supreme Court of this State.

Mr. Leadwala There are but four cases.

The Witness I suppose I must know all of those cases in a general way. I would recognise the doctrine but sometimes I do not recognize them by title. Hill against Smith may be a case that I tried but the case I have in my mind was Sims against Smith. May be a man named Hill was in the same case.

Mr. Belcher I would like a ruling of the court on this matter.

Mr. Leadwala The Judge is on the stand here either as a lawyer or a Judge in Nevada County?

A- I am not here as a lawyer or a Judge I am stating the facts Mr. Badwalader You are now here as a witness. You are a lawyer and a Judge from Nevada County and you made a statement here which is in substance that you never knew of a certain right to be questioned. I am calling the attention of the witness to four judicial decisions which necessarily came before him as a lawyer and with which he was necessarily familiar. Two of which cases he probably tried.

The Court I understood the testimony referred to the custom that existed among miners.

Mr. Badwalader. Logan against Horiscol was a controversy between miners.

The Court I do not suppose you want to prove what the law is,

Mr Cadwallader I want to prove by him that he knew of these decisions and the law there laid down

The Court I do not know that quite reaches what he stated. His statement was in regard to the recognition of miners and not as to whether the Court so ruled or not Mr Cadwallader I am asking him as to his own knowledge.

The Court In the first case that you alluded to I suppose it is proper to inquire about that because he tried the case and it is presumed that he heard from the miners.

Mr Cadwallader He said he always charged the

Juries in Conformity with
that Case.

Mr Belcher Which Case
Mr Cadwallader Legun Against
Driscoll

Mr Belcher I have not heard
him state so and we
say that what he instr-
ucted a jury is not in
Cross examination and it
is not a matter about
which he is entitled here
to inquire

The Court As to how he
instructed the jury I do
not know whether that is
improper or not. in Cross
examination a person is
entitled to a little latitude
especially in such a matter
as proving Custom

Mr Belcher We except.
Mr Cadwallader Now I
recur to Hill Against
Smith in the 27th Cal-
ifornia in which you
said you took a part
in the trial }

A No sir. I said it might be that Case, The Case I had in my mind was Sims against Smith and unless man named Hill was in the Case it is not the same Case, the 27th California did you say.

Q Still Against Smith?

A That is not a case that I had ever anything to do with I think

Mr Belcher It is a Placer County Case

Mr Codwallader You are familiar with that Case

A State the doctrine and I will state it

Q That the Courts of this State would not permit any departure from the Maxim Sic Utere tuo ut Alienam non laedas?

A I do not remember it I do not call it to mind The Court Unless this is to lead to something else

I do not see any points in it.

Q And that no use can be considered lawful which prevents the plaintiff from the enjoyments of his rights

Mr Belcher I object that this is not in Cross — examination and is immaterial.

Q Are you familiar with the Case of Jamison against Kirk?

A State the doctrine of it.

Q The same doctrine as in Hill against Smith?

A I do not seem to remember it. I think I remember a case in which a party named Kirk figured but if my memory serves me that related to running water — the right of a proprietor above to run water on his neighbor

below. Is that the Case.
 { It was a Controversy
 between a ditch owner and
 a miner }

A I did not so understand
 it. I thought it was two
 adjacent land owners.

{ One was a hydraulic
 miner I will call your
 attention to that Case.

The Case was decided
 by the Supreme Court
 and it went to the

Supreme Court of the
 United States by a Writ
 of error and was there
 decided by Judge Field

A That involved the right
 to run a ditch across
 a mining claim or
 Visa versa - to wash
 down a ditch. It was
 decided within four or
 five years was it not?

If it is the Case I have
 in my mind it is one
 in which Judge Field
 held that the right to

to run ditches across
the Public Domain did
not involve the right of
taking mining ground
O No sir that is not
the case, That was another
one, But Jamison against
Kirk went by writ of error
from the Supreme Court
of this State?

A I do not remember
the case by title.

The Court Unless this is
to lead to some other
question I do not think
it is worth while to
delay very much with it
Mr Cadwallader I will have
the Books here in a
short time and I want
to show his familiarity
with this case.

The Court. For what
purpose

Mr Cadwallader To show
that in his practice he
applied them in Nevada
County.

The Witness These Cases
 were decided long since I
 had anything to do with—
 Q (Interrupting) I am spe-
 aking about your practice
 you are still a practicing
 Lawyer?

A I am practicing the
 Law Business

Mr Goodwallader I will
 leave this branch of the
 examination until tomorrow
 morning and will then
 bring the books in and
 in the mean time I will
 go to something else

Q Your statement was
 kind of sweeping when
 you said that this was
 a rule that was univers-
 ally recognized from Am-
 ador to Siskiyou and
 universally acquiesced in?

A I stated for the third
 time — I said that I
 had never known it to
 be questioned but two or
 three times, I so stated

Q What Cases were those in whar instances were those.

A One was in the Driscoll Case and another was in Chew - Esmond against Chew and some other Case that I do not now Call to mind.

Q Still against Smith?
A No sir I think Still against Smith occurred later, I do not recollect it by title probably if you showed me the Case I might recollect it

Q I will ask you if you recollect the Controversy between the old Cherokee mine and the Spring Valley mine involving the right to an outlet into Saw mill ravine which was decided just about the time that Judge Lewis died.

Mr Belcher Some time after

Mr Cadwallader A short
time after

Mr Belcher Gregory v. S
Harris. I presume that
is the case. It was in
regard to a water right
where a ditch had been
dug and they began tail-
ing into it.

Mr Cadwallader No Sir.

It was in regard to the
right of the Spring Valley
Company to use Saw mill
ravine as an outlet?

A I will say this there
was one case tried up
there which was very
lengthy and the findings
were sent to me.

Q That is not the case.
Gregory against Harris
is the case I refer to?

A I know nothing about
the facts of the case.

2. Have you mentioned the only instance where the doctrine in Logan versus Driscoll applied?

A. I presume not. I presume wherever the question of priority arose the doctrine in Logan vs. Driscoll, which was affirmed by the Supreme Court I think was applied. If you mean to say by myself I should pay frequently, and probably by others. Let me say though that the case of Logan against Driscoll did not raise any question at all in regard to custom or usage or anything of that kind. It was not pleaded. An attempt was made in Logan against Driscoll to introduce custom and it was ruled out because it was not pleaded. No — I think I might be mistaken in that. The Judge was requested to instruct the jury and he declined upon the ground that there was no custom — no proof in regard to custom.

2. The Court stated that no

custom would be had under such circumstances.

A. The Court said "as you have not pleaded or proved a custom, I will not instruct the jury on that."

Q. Did not the Court go further and say that nothing would justify -

Mr. W. B. Belcher. (Intg.) I object to that.

Q. Where are those reservoirs with reference to the Sierra Nevada mountains.

A. They are high up in the mountains, pretty well up towards the summits.

Q. Well, how near the summit - the first summit - is this big Bowman Reservoir.

A. The Bowman Reservoir, by the route we travelled to go to the summit, would be 20 miles, say, but if you went in an air-line it would be much shorter.

Q. In a straight-line it is about 8 miles, is it not? Just

come and look at this map please — I mean how far is it to the first summit — the summit of the Sierra Nevadas. A. About twelve miles — say eleven miles. This pointing is the Milton Company's Reservoir.

Q. That is only three or four miles off? A. Yes.

Q. How near is the Eureka. The Eureka is within five miles?

A. About six miles. That is near the South Yuba.

Q. This country is all devoid of earth. It is a granite country?

A. It is a granite country. It is not all devoid of earth by any means.

Q. And these reservoirs you speak of are simply old lakes and old ravines with their outlets walled up. That is what you call a reservoir.

A. The French Reservoir and the Eureka Lake —

Q. (Intg.) Do not make a speech, please. My question was—are not these reservoirs formed by the mouths of ravines stopped up or lakes with the outlets closed? That is my question.

A. I could answer your question by saying "No". Your question involves what makes necessary two answers. Some were and some were not.

Q. Well, take the Bowman Reservoir.

A. The Bowman Reservoir was a ranch in part—and^a cultivated ranch with a hotel upon it.

Q. It was in a ravine?

A. No sir, it was a flat—a valley.

Q. It was a flat and in a ravine?

A. It was a valley.

Q. Well, a valley?

A. It was more than a mile wide and five or six miles long—a beautiful valley.

2. Its outlet was a gorge was it not?

A. Its outlet was a gorge - Cañon Creek.

2. There is where the dam was put: - A. They built their dam at the lower end of the valley and flooded the whole valley.

2. How long is the dam?

A. Well, I should think 300 or 400 feet. Perhaps twice that and may be a thousand feet on top. It runs down I think much shorter at the bottom, as the Cañon or Ravine narrows.

2. These reservoirs were all within the snow ~~land~~ line, were they not or are they not?

A. Yes.

2. All within the snow line. Very heavy snows come there?

A. Yes; on this snow line from a few miles above Nevada City - the snow falls. In the regions of these reservoirs there are very heavy snows.

2 These reservoirs do not fill until the snow melts in the summer, do they?

A. Sometimes they fill in the fall, but not usually until there comes a thaw in the winter.

2 They do not increase or diminish the quantity of water that comes into the valley, do they?

A. That comes into this valley do you mean?

2. Yes?

A. They do not create water or destroy it. In that sense they do not increase or diminish the quantity of water that falls from the Heavens.

2. And they do not send the water down into the valley until after the snow commences melting.

A. They do not send the water into the valley until they have water in them. Sometimes the first storms in the fall are rain storms at the points ^{where} they are situated and they fill; but

usually they do not fill until ^{the} snows melt.

Q And if there were no reservoirs there the water would come down with the melting snows, would it not?

A. It would.

Q. Do you think that you are conferring any particular benefit upon the channels of Sacramento by sending that water down in the condition that you do - passing it through these hydraulic mines?

A. Well, do you mean is it any better then, when it comes to the valley, than it would if it did not pass through the hydraulic mines?

Q. Yes.

A. Is that what you mean?

Q. Yes.

A. No sir, I do not.

Q I will ask you whether you think you are conferring a benefit to the navigation of this river, the way you send the water down charged as it is

with slum.

A. I do.

Q. You send some of it down charged with 8 or 10 per cent, do you not?

A. Probably, yes.

Q. You think that improves navigation, do you?

A. I do.

Q. Say nothing about the sand?

A. I think 10,000 inches of water with 10 per cent of slum in it — a steam boat can run through it and I think that without any water she can not run very well.

Q. The water would come anyhow, would it not?

A. It would not come at the same period.

Q. The water would come down if it was not for the reservoirs?

A. It would come when the snow melt.

Q. It would come down from the melting of the snow?

A. Yes it would all come down

except what evaporated.

Q. These snows kept melting until in September?

A. There will usually be some snow left in the mountains until pretty well towards September. The great bulk of the snow, however, disappears by July.

Q. And a good deal hangs even the whole year round?

A. No sir. A little of it hangs on the year round.

Q. You can always find snow in the neighborhood of the French Reservoir, can you not?

A. No sir; usually you can not find snow in the vicinity of that reservoir. The basin of that reservoir — most of it slopes towards the west and south and a little of it to the north, and on that portion which slopes to the north around that reservoir I have never seen any snow after the 1st. of August. I have seen snow ^{later} later than that across the ridge, where there

was timber and on the slope immediately above that reservoir on the south side, but that portion of the slope towards the north is not timber.

2. That is a regular region of lakes, is it not?

A. Off on the south of the reservoir, southerly, there are a large number of lakes. Some of them I have never visited and some I have.

2. All this water which is scooped up in those reservoirs would otherwise find its way into the Yuba, would it not?

A. Yes it would find its way to the Yuba.

2. A great deal of this water is lost by evaporation, is it not?

A. Yes and by absorption.

2. The evaporation amounts to 28 per cent of the whole rainfall does it not?

A. That depends, I judge on the locality. Here at this place the evaporation would be much larger than at the summit

and the absorbtion too.

Q. I am asking you whether there is not a natural loss of about 28 per cent.

A. From evaporation?

Q. From evaporation and absorbtion.

A. Well, I am not prepared to answer the question, sir. The loss must be very considerable but as to the percentage I never made any experiments and have not observed in such a manner as would enable me to give an opinion worth anything.

Q. All this water would go into the Yuba River, would it not?

A. Yes, except what is lost by ~~et~~ evaporation and absorbtion.

Q. You do not pretend to send down more water down the Yuba River than would naturally go down it?

A. No sir. I do not call to mind any of those ditches that furnish water to the Yuba River that would not naturally flow into it. I do not call to mind any case where they bring it on the water shed that would not discharge

into the Yuba River.

2. You mentioned being connected with the State Drainage Commission?

A. I was.

2. That was the Commission of which Mr. Parks was President?

A. Yes.

Here the Court took a recess until January 5th. 1882 at 9.30 o'clock A.M.

In the Superior Court
of the State of California
in and for the County of
Sacramento

The People of the State of California	} Morning Session Thursday Jan'y 5th/82
vs. The Gold Run Ditch and Mining Company	

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Winfield J. Davis
Official Reporter

In the Superior Court
of the State of California
in and for the County of
Sacramento.

The People of the State of California	} Morning Session
vs.	
The Goose Run Ditch and Mining Company	
	Thursday
	January 5 th 1882

Cross-Examination
of
Niles Earls

resumed

Mr. Cadwalader In regard to the
quantity of water coming out
of those reservoirs you fixed it
at 20000 inches did you not?

A No, I did not fix it at all
Q. I have got it in my notes here
20000 inches. You do not know
what it is do you?

A Why, I suppose I differ
greatly at different times

Q. Well, I did not suppose it

comes vary, that is, the flow from the reservoir?

A The flow from the reservoir?

Q Yes. A. The water

in the reservoir is penned back, & discharged therefrom by gates, and its flow regulated by the works and wants of the owner.

Q I understand that. But you spoke of a flow of 20000 inches?

A. Probably what you refer to is this: I spoke of the quantity of water that was turned off at the time of the closing of the dam, and stated that that was approximately 20000 inches I thought; but to say precisely where that came from, I could not.

Q You could not tell anything about that could you?

A Where it came from?

Q No. I could not tell anything about the question of the extent of the flow? You did not measure it, did you?

A At that time?

Q Yes?

A. Oh, I only measured it by measuring the depth with sticks and that kind of way, and with the eye. I did not make, I could not make any accurate measurement.

Q. Your eyes did not happen to be very good at that time, did they?

A. My eyesight was as good as it is now. My eyes are not as good as they were 40 years ago.

Q. But I mean at the time spoken of on the Yuba?

A. They were as good as they are now. I presume you refer to some trouble I have had with my eyes. At times they have troubled me very much but have never interfered with my sight. The failure of sight is from age I judge and from use.

Q. You were on the banks of the Yuba there at Smartsville, were you?

A. No.

Q. Below Smartsville?

A. Yes.

Q. What time was that?

A. I think it was in the month of October if my memory serves me.

Q. What year? A. 1880

Q. Where were you? At the Guba dam?

A. I was at the Guba dam and various points up and down the river.

Q. That is 9 miles from Marysville
A. Yes.

Q. Then was the time you saw this extraordinary flow?

A. The time I saw a smaller flow.

Q. No? You time you saw this
2000 inches which you say was
200 feet wide and 2 feet deep.

A. It was the time when I did not see it, when it was shut off.

Q. But I mean when it came down after you had ordered it?

A. I saw it before it was shut off. I saw the quantity of water flowing before it was shut off, and saw it when it was lessened.

Gey being shut off, and saw it after it came turned on again.

Q. Where did you see it? At the Yuba dam?

A. In the Yuba River above the dam.

Q. You did not measure it? What I want to get at is this: Was not 20000 cuiches more than all the water in that shed?

Is not 17000 miner's cuiches all the water that comes down the Yuba?

A. Well, the quantity of water that comes down the Yuba varies. It must be at times 500000 cuiches I would suppose; at other times the quantity is comparatively small.

Q. I will get you down after a while to answering some of my questions. What number of miner's cuiches have been utilized on the Yuba?

A. On the Yuba River?

Q. Yes, on the Yuba River?

A. I do not understand you.

Q. What number of miner's

cashes have been employed in mining? A. Of the water from the Yuba River, or along the river?

2. Of the water from the shed, the water shed. I will put it in that way?

A. Well, I would suppose, take all the branches of the Yuba River there must have been —

2. <Intj> One moment. Do you know in the first place?

A. I do not know the precise number of inches certainly. I am accustomed to judge water by the eye and have been for 20 or 30 years and can form some estimate of it. But it certainly all passes. Men I believe can not even where they measure.

2. Is it more or less than 17000 inches? A. It certainly must be greatly more than 17000 inches at times; it must double that

2. Have you ever seen the table that was returned by the

Assessor of Nevada County
under your drainage acts?

A No. Well, I think very
likely I have seen it, but I
do not call to mind Kautie-
Alamy.

2. That purported to show the
number of miner's inches used
on that river for the year,
did it not? A. It proposed
to show so far as reported by
the miners, I judge. It's duty
was to assess the number of
inches reported by them as having
been used and the table should
show it.

2. They had to be reported un-
der oath did they not, to the
Assessor? A. Yes, the
Law required it.

2 Now have you ever seen
the table made up?

A No. A portion of it would
be in Sierra County; I do not
call to mind that I ever
saw that.

2 Just look at that, called
Table #3 Yuba River, and

See whether the total number of inches on that whole shed which includes a very large portion of Serran and Plumas is not less than 17000 inches, 17.000 Twenty-four inches

A. Do you wish me to foot this and see?

Q. It is all footed up there?

A. I do not see any footing.

Q. There it is (pointing) that is to be divided by 364, but if it was divided by 300 the quotient would be about 17000 minus inches?

A. If it is intended to mean inches, it is 5.458.171 there

Q. Take 300 days and that would give 17000 inches a day would it not?

A. More. And a fraction

Q. If it would be 364 days it would be less?

A. Yes.

Mr. Belcher That would be on the basis of using it Equally all days in the year

Mr. Cadwalader These reports

are made of the number of
muni inches used in each
year. Each Company is named
here

Mr. Belcher And the amount
used during the entire year?

Mr. Cadwalader Certainly

Mr. Belcher The rule is that
muni do not use the water
the entire year

Mr. Cadwalader The witness
says that in the Tuba they do
or practically so

Mr. Belcher Mr. He did not
say any such thing

Mr. Cadwalader If this was
a question of medicine I would
cheerfully submit Mr. Belcher,
but being a question of law
and fact, I can not

Mr. Belcher A question of law.
That is pretty good

Mr. Cadwalader What are these
muni which you said were
in operation in Grass Valley
Co. township?

A I states a muni was
in operation near the Narrows

Inaja Rail Road between Nevada and Grass Valley, was last winter, running then debris right through under the railroad? They worked just above the road. I stated I did not know the name of the mine or the owners. I know several men, Cornishmen, who have owned land in that vicinity.

Q What was the names of the mines tailing into Deer Creek? A. The mines tailing into Deer Creek are the Manzanita, The Strochmann, The McCormack, and The Murchie mine. At Scotts Flat there are 2 or 3 the names of which I do not know. They are ordinarily called the Scotts Flat mines.

Q These mines use about 100 inches of water each do they not? A. Some of them use perhaps about 100 inches. Some of them use 2000 inches.

Q Which one?

A. The Manzanita has a ditch
— I do not know that I have
examined it particularly, but I
have understood that it ran
2000 inches of water.

2. The Manzanita is returned
here as using 55,000 inches?

A. I am surprised it has returned
any there. I was not aware it
was running at all that year.
The Manzanita lay idle, practically
idle for the most of the time
for two or three years. It changed
hands and perhaps Sowell
the present owner had pur-
chased it by that time
and used some water in the
year 1880.

I can say that the mining
population of your
County has been reduced
since 1865 as 100 is to
three (3) ?

A. No, I did not

Q Well you said "immensely"? A I said in the area about Nevada City the population had been reduced. I did not use the word "immensely" probably but "largely".

Q You did not use the word "immensely"? A No.

I said that in that area of three miles there are not probably more than 100 men engaged in mining, whereas in the winter of 1850-51 there were probably 15000 engaged.

Q Did you not say this: that now there were three companies where there used to be 100? A Yes I said that.

Q What was the proportion of change? A Yes.

Q From after 1865 to before? What were the methods of mining there

in Deer Creek in early times? A In the earliest times with rockers, then with long Toms, then with short pieces, then with what we call goose necks, and now with what are termed monitors or little Giants

Q The monitors came in since 1865 did they not, and they have been enlarged so as to be called Dictators. A monitor when unusually large is called a Dictator is it not? A There

are various names, some patterns they designate by one name and some by another.

Q And they have increased their force very much by rifling them have they not?

A The rifling process was invented about the

time of the Monitor perhaps a little sooner. The object of it was not to increase the force but to direct and straighten the steam.

Q That increases the force does it not?

A It concentrates the force.

Q That increases it does it not? A It increases it upon a given point.

Q Well on the same principle that a rifle ball projected from a rifled cannon will strike an object with much greater force than a ball from a smooth bore.

A The principle may be the same. I would not be prepared to say about that.

Q Water discharged from one of the Monitors or detectors is substantially solid when it strikes the

bank is it not?

A It is pretty solid when you see it hit an object you see it go with great force and power provided the pressure is sufficient

Q A rifle ball will not penetrate it?

A I have not tried it to know

Q You can throw a stone weighing 40 or 50 pounds right on the surface of the stream and the stone will ride it will it not? A It would deflect a stone from its course no doubt, even at that weight if thrown against the column

Q But if you drop a stone vertically on it?

A Lay it on it?

Q You could not lay it very well on it. But drop it on it and it would go off just as if it had

struck a hard surface?

A It would throw it away beyond a doubt. The water goes with great force.

Q Drifting was practised very largely in Nevada in early times was it not?

A In the very earliest times in Nevada the Coyote diggings as they were termed which were on the range there were discovered and that was originally drifted out on the bottom. Since that time it has been hydraulicked.

Q That got the name of Coyote? A Yes Coyote Diggings -

Q There is a large amount of drift mining in Nevada is there not?

A Very little so far as I have ever observed.

Q A good many of these hydraulic mines have been turned into

drift mines have they
not? A No, I think not

a great many of them.

Will some of them have?

A A good many of
the drift mines have
been turned into hydraulic
mines

Q That was not what
I asked you. A good

many, or at least some
of the large ^{hydraulic} mines
have been turned into

drift mines have they
not? A I do not

call to mind any except
this: I know a case
where a hydraulic mine
has caved so that it
has become impracticable
to work it and the banks
have become so high
they are now testing it
to see if they can
make it pay to drift

Q I will ask you about
the Sargent and Jacobs
mine? Whether that is

not now being worked
by drifting process, worked
by shafts? A I think
not. They sunk a shaft
to prospect, for a year
and a half. I am not aware
they are working by drift
process. I think indeed
they are not

Q How many miners are
working by the drift
process on the Ridge in
Nevada? A There is
one drift mine on the
Ridge known as the
Durbeck mine. The
number of men they
work is not known to me.
I would suppose 40 or 50
but it may be twice
the number.

Q You spoke of another
mine that was being
worked by the drifting
process since the cave

A Not working. They
are merely prospecting,
running a tunnel in

and prospecting around to see if they can find anything. They are working but few men, half a dozen men perhaps.

Q You say that half the population of Nevada County was engaged in mining between 1850 and 1865?

A Half of them.

Q Yes. A No I did not. At least I am not aware that I so stated. I think they were

Q Well that is the way I have it here. Now what proportion of your population is there now engaged in mining?

A Do you mean of the entire, of the aggregate of the population?

Q Yes. A Supposing our population now to be 22000.

Q No, take it as it is on the map - at what it is - 21000.

A That is like my judgment, but an estimate of the population. That is not taken from any authentic source

Q I will put it in this way to you: What are the principal hydraulic mines on the Yuba River in Nevada County?

A On the Yuba? Would you embrace the different forks of the river?

A Yes Alwell I of course could only name a portion of them, I can name the important ones.

Q Just name the important ones. A On the South Yuba river -

Q (cutting) Never mind, do not distinguish between forks because that consumes time

A On the Yuba river, then The Blue Tent, the Sailor Flat, the Omega, the

Alpha - It is either Alta or Alpha - and half a dozen smaller mines in that vicinity, the names I do not know, but smaller. Then the Milton at French Corral, and the Milton at Sweetland

Q They are the same?

A They are different places and separate and distinct mines miles apart.

Q They are all under one Company? Ayes.
The Yuba Tunnel

Q That also belongs to the Eureka Lake Company?

A The Yuba Tunnel is a separate Company. Then the Badger Still I think there is more that one mine at Badger Still but I have not been on the hill recently and am not certain. Then the Laird Claim of the Eureka Lake Company
Owens the Eureka

Lake Company?

alth they have mines scattered twenty miles apart: the Laird Claim, the Farrel Claim and the Consolidated Claim. The North Bloomfield Claim, the Boston Claims, the Blue gravel Claims, the Illinois Claims and another claim at Moore's Flat the name of which I do not recollect.

○ The China?

As there is a China claim there also the other one I do not think the name of the Snow Point Claim. Then there are some smaller claims at Eureka. I have mentioned those in going along the more important ones that are

working. I have not aimed to mention those which are not working for the last year we will pay.

Mr Byrne Did you mention Relief Still? And I did not mention Relief Still at all. There are half a dozen claims there which are working sometimes and at other times are stopped. The same way with the other points I have mentioned. There are a large number of claims working at times.

Mr Badwalader You have mentioned about 12 claims. Suppose those mines discontinued operations how many persons would be thrown out of employment

A The whole population of that part of the County

O Sub? Never mind I did not ask you that question

A You asked me a question and I answered it

O I have asked you the same question again.

Mr. Byrne I simply interpose this objection because there has been so many exceedingly impolite interruptions in the course of Judge Searls testimony and as the opposing Attorney in this case I feel it to be my duty to ask the court that this witness shall be protected from any further examination of this kind.

The Witness Gentlemen, I shall take these things patiently. I will say this to you Mr. Leadwalaader, I aimed to answer your question. I omit your question and so far as I can I will certainly give you an answer.

Mr. Leadwalaader Q - You do not feel that you need any special protection from counsel?

A - Well here I might in some instances; outside Sir I do not

Q - You do not hear do you?

A - If I need any I have confidence that His Honor will furnish me the protection.

Q - I will ask you the same question that I asked Mr.

Gaylord, You know him do you not? A- E. H. Gaylord?
 Q- E. H. Gaylord? A- I know him sir.

Q- Just suppose that these twelve mines should discontinue operations how many of their employees or how many persons working in those mines would loose employment? A- All of the men working in those mines.

Q- I understood that, but -

A { Intg } Then your question would be how many men are probably employed or are employed in these mines.

Q- My question is perfectly plain. I will put it in this way, this is the question:

Mr. Sargent testifies that if these mines were stopped about four hundred men would be thrown out of employment. Is that a pretty fair guess?

A- Do you ask me?

Q- I will ask you - I was asking Mr. Sargent then and Mr. Gaylord about the number

0837

Not in Hayes case

of men that would be thrown out of employment in case all the mines ~~and~~^{at} the head of Bear River were stopped. Now I ask you - you having enumerated somewhere in the neighborhood of twelve important mines as you call them on the Yuba, how many men would be thrown out of employment in case these mines were stopped?

A - The mines I have enumerated in my judgment employ one thousand men. If these mines were stopped these men would be thrown out of employment.

Q - That is a fair answer. What is the nature of the labor performed by these men - these thousand men?

A - It is varied - the ordinary labor required in running a mine. Some of them attend the Monitor, some of them pick gravel and pipe clay, some of them remove boulders, some of them attend sluice keeping it clear.

and a great variety of labor is employed.

Q - What proportion of that labor say in the last four or five years has been Chinese or the lowest order of labor?

Mr Belcher objected to the question.

Mr. Cadwalader I will put it the lowest order of labor and will strike out the Chinese?

Mr Belcher We object to that also

Mr. Cadwalader I will not press it.

Q - When were the Placer mines in Nevada or when did the great mass of miners leave Nevada? A - Of the early day?

Q - Yes, Of the early day?

A - What miners that were there during the Winter of 1850 and the Spring of 1851 were scattered largely and they went to the upper portions of the County.

Little towns were built up in the upper part of the County.

Q - I am speaking of the whole County!

A- Our population fell off most rapidly when the Fraser River excitement occurred, but the precise year of that I do not now call to mind
 Q- That was in 1857?

A- 1857.

Mr. Belcher 1858?

Mr. Cadwalader That was the time of the hejira was it not?

A- Yes

Q- That was the time when all the mining Counties lost about three fourths of their population? A- Three fourths?

Q- Yes. About three fourths?

A- I was not aware that they did. We never lost any such proportion. We never lost one-fourth from that cause.

Q- El Dorado and Placer lost fully that much. The men conducted their operations by burrowing, cradling, and using the long tom and sluices with the gooseneck? A- Yes.

Q- What was the size of their claims?

A- They varied

in different localities. Right about Nevada City the claims - hill claims as they termed them were about sixty feet square. In some places they were larger and in some smaller. In Bald Run which was a very rich ravine, the claims if my memory serves me were only ten feet up and down the stream and running to the backs. At other points in the ravines they would be one hundred feet and later the size of claims has been increased.

Q- Different districts had different rules and regulations?

A- Yes; in regard to the size of claims which was regulated by the character of the ground.

Q- And their tenure - the work necessary to hold them?

A- Yes.

Q- And the manner of recording?

A- At different times they had different rules in regard to that. When I first went to

Nevada County a man had to work his claim or leave his tools there. He had to work it once in ten days or it was deemed (to use an expression) jumpable and that soon gave place to recording.

Q- And then you had recorders to record claims? A- Yes.

Q- And mining rules and regulations were passed relating to the size of claims?

A- In many instances there were, and in some places not at all. They were either fixed by the written laws or by local custom which prevailed outside of the written law.

Q- These mining rules and regulations also fixed the amount of work that was necessary to be done?

A- In some instances they did. In some they provided that when a certain amount of labor had been performed that thereafter the claim was

not subject to relocation, not punishable as the term was

Q- That was the subject of mining laws and regulations?

A- It was one of the subjects.

Q- But the rules and regulations differed in different mining camps?

A- Yes.

Q- Were not the miners particular about one thing in having their rights to their different claims respected?

A- Some of them - all men who had claims as a rule were tenacious in having their rights respected. Sometimes those who had no claims were rather anxious to get hold of other mines.

Q- They would go to law at the drop of a hat about their mining claims? A- Sometimes they would go to law.

Q- The holders of other property would suffer and remain quiet?

A- Litigation was a frequent occurrence.

Q- Were miners suffered to cover up - were the owners of one mine -

ing claim suffered to cover up other men's claims?

A. In many instances they were and did so.

Q. As a general thing?

A. They did not always do it because most mining claims are actually so situated that they could not be covered up. I should answer it this-wise; claims in the streams were as a rule covered up.

Q. So as to prevent their being worked?

A. Yes. The claims in Shady Creek from one end to another, in which Creek that Logan Claim is situated were covered up and are to this day. The Eureka Lake Co. owns claims in there which for fifteen years have been covered up so that they could not be worked.

Q. You as District Judge held that to be unlawful Mr. Belcher. We object to that question.

Mr. Caldwell. You tried

that case? Logan v Dinsell

A. Yes

Q. The judgment in that case was affirmed?

A. Yes. It was affirmed.

Q. You also tried the Chew case?

A. I tried the Chew case.

Q. And the same doctrine was held there.

Mr. Belcher I object to that and I would like to get the ruling of the court.

Mr. Cadwalader We propose now to call the attention of the court to the case of Hill against Smith in the 27th California, page 476. Courtright against the Bear River Company in the 30th California page 573. Janison against Hirk 98th United States Reports page 453 and that case I believe is reported in 47th California. I have not the date exactly.

Mr. Belcher It is in the 51st under the head of Pitecomb vs Hirk.

Mr Caswallader And Heimer
 Against Lowery, Eleventh Cal. -
 104 and Bvige Against
 Underwood in the Sixth
 California, The object is
 to enquire of the gentleman
 whether he was familiar
 with those decisions and
 whether they were followed
 in Nevada County in Con-
 troversaries between miners
 and others, For instance
 the nature of the question
 would be this: ^{Not} The maxim
 Sic utere tuo ut Alienam
 non laedas upon which
 they are grounded has lost
 none of its governing force,
 On the Contrary it remains
 now and in the mining
 regions of the state as
 operative a test of the
 lawful use of water as at
 any time in the past or
 in any other Country, It
 is to show his familiarity
 with these doctrines and
 the application of them

in Controversies in his
County

The Court For the purpose
of showing

Mr Cadwalader (Interrupting)

For the purpose of showing
that there was no such
Custom or no such practice
as he testified to in his
direct examination and
that there were notable
breaks in it.

Mr Belcher Now we object
to this course of examination
that this does not even
prove nor tend to prove
the incorrectness of what
the witness has stated.

The Conclusions of the Courts
are open for him to use
in arguments not only
this Case but any other
Cases in which mining
and water rights have
been considered by the
Courts, He has testified
to a fact, Facts are to
be proven, And Custom is

a question of fact always
 and is not a question of
 law primarily. The law will
 determine whether on the
 facts proven a custom is
 well established or not and
 the witness has stated what
 the facts were and this
 is not proper cross examination.
 The Court after argument
 of course the proposition is
 plain enough. It is of no
 consequence to prove the
 law by a witness, I do
 not suppose that is the
 proposition at all
 here. The question is sim-
 ply this: Judge Searls is
 put on the stand as a
 witness to prove a custom
 just like any other witness
 on the stand and so far
 as the right to test the
 accuracy of his knowledge
 and his sincerity and
 everything of that sort. I
 do not pretend to shield
 him from the rule nor

he will not ask it. The question is simply this: did he know when he said that that was the Custom that those Cases had established a contrary doctrine. That is all there is of it. It is not a question of weighing the effect of these decisions. I do not suppose it is expected to examine these decisions here but the witness may state how he understood them. The proposition is simply this. You say that is a Custom did you not know of these decisions. Mr Belcher Then the Cases will be severally passed to the witness so that he can see them.

The Court That is not material because the question is did he know of them at the time he stated it was the Custom and if he did not know

them of course that ends it
He is not to say that he
correctly construed the law
Mr Belcher The Court then
overrules our objection

The Court So far as the
general question is concerned
when he stated that that
was the custom did he
know of these decisions.

Mr Belcher To that extent
we would not make any
objection

The Court At present I
do not see anything else
in it except to test the
accuracy and sincerity of
the witness

The Witness That was the
question that was asked
(The Reporter read the ques-
tion)

Mr Cadwalader I will with-
draw that question and
I will ask you whether
you have had the California
Reports in your office during
the time you have been

practicing there in Nevada?
 A I have.

Q What has been your familiarity with them?
 A I have been tolerably familiar with them I judge upon most subjects. With some questions - taking Street Assessments in San Francisco I seldom do more than to glance over them, I am not familiar with them. Upon matters relating to mining I usually examine them.

Q What has been your familiarity with the decisions relating to mining and water controversies?

A I have been familiar with them.

Q You examine them as they come out?

A I do yes.

Q Have you had occasion to use them?

A Thousands of times

Q And to apply them?

A Often.

Q Both as Judge and as attorney {

A Yes

Q And give advice in regard to them

A Frequently.

Q I will ask you now whether you were familiar with the Chew Case - Esmond against Chew?

A Entirely familiar with it

Q In the fifteenth Cal - {

A Yes I decided it

Q Your judgement was affirmed was it not

A No Sir it was reversed I committed an error they said.

Q You also decided Logan against Driscoll?

A Yes

Q There your judgement was affirmed?

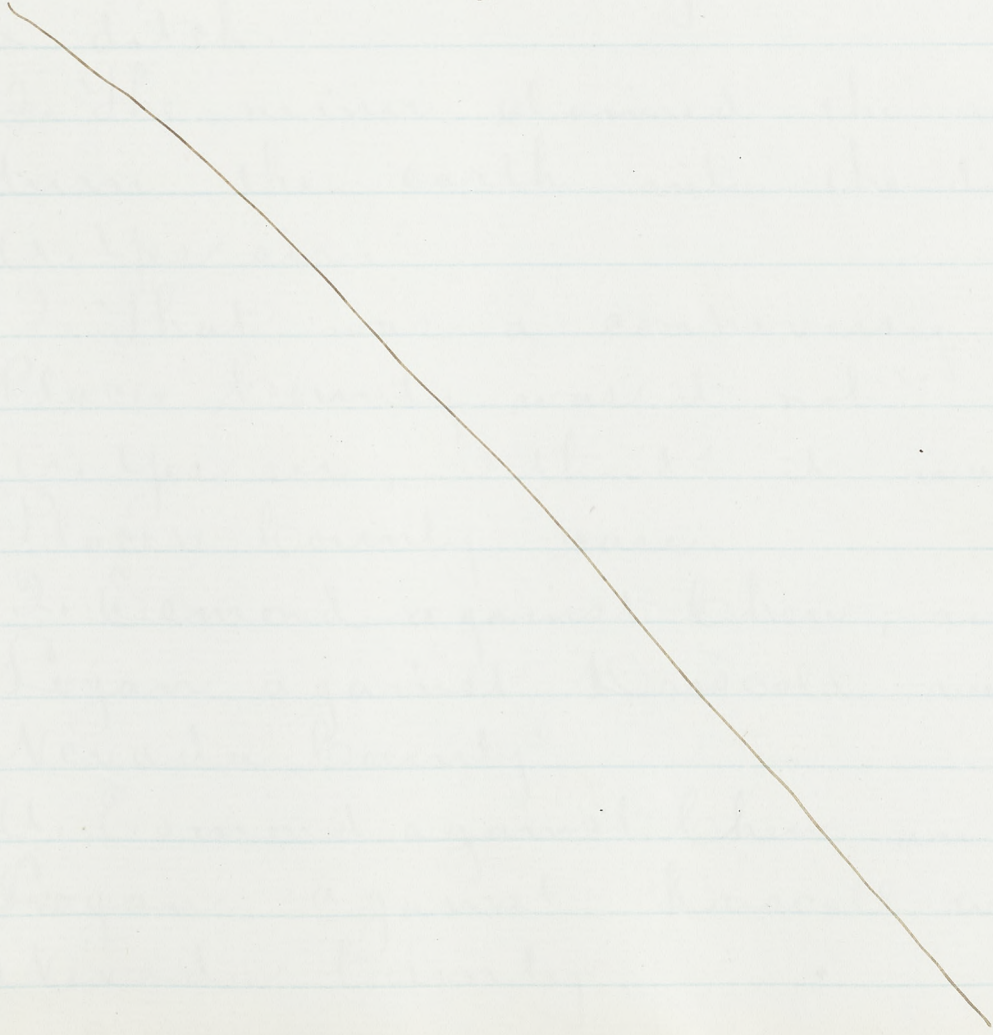
A Affirmed.

Q Are you acquainted with a Case of Weimer against

Lamery in the 11th Cal
A I do not recollect Case
so well by the name. If
you will tell me the
doctrine I have no doubt I
could tell you.

Q Eleventh California 104-
Birge Against Underwood
What I want to get at is
whether you were familiar
with that Case, I want to
know whether you are familiar
with that Case?

A I know of the Case



Q. I will ask you whether you are familiar with Hill against Smith?

A. Yes sir, I know of Hill against Smith. I looked at it last night particularly. That is the case that yesterday I did not seem to recognize.

Q. Hill against Smith?

A. Yes sir.

Q. The controversy was one between a miner and a ditch owner, was it not?

A. Yes sir, turning earth into a ditch.

Q. The miner claimed the right to turn the earth into the ditch?

A. Yes sir.

Q. That was a controversy in Placer County was it not?

A. Yes sir, I think it was a Placer County case.

Q. Esmond against Chew, and Logan against Driscoll were in Nevada County?

A. Esmond against Chew, and Logan against Driscoll were in Nevada County.

2. Weimer against Saurer was from Eldorado County I believe?

A. Yes sir, and Jones against Jackson was from Sierra, the one you mentioned yesterday.

2. And Courtwright against the Bear River Company, were you familiar with that ~~company~~ case?

A. I am certainly familiar with all the cases that the Bear River Company ever had. I do not know as I recollect it by name.

2. I will just turn to that. It is where this expression is used:

"A nuisance is defined by the Statute as 'anything which is 'injurious to health, or indecent, 'or offensive to the senses, or an 'obstruction to the free use of property, 'so as to interfere with the comfortable enjoy-
ment of life ~~or~~ of property.' This definition is perhaps more com-
prehensive than that given by Blackstone, which is 'anything 'done to the hurt or annoyance 'of the lands, tenements or heredi-
taments of another.' Injuries 'occasioned by wrongfully causing

or permitting the water from water ditches to flow upon or over the lands or mining claims of others, have always been treated in this State as nuisances, and actions to prevent or abate such nuisances are of every day occurrence."

Mr. Belcher. We will make another objection here, that this is not within the range of examination that was permitted, as I understood it by the Court. He may ask the witness, as I understood the ruling, if he is acquainted with the case by name. Then if anything further is required either the case should be handed to the witness for his examination or else the facts and points in the case and the decision and if any statement is to be made then it should be a full statement that the witness maybe fully made fully acquainted with it.

Mr. Badwalader. The witness evidently desired me to refresh his recollection.

The Court. I do not see anything important in it.

The Witness. That Bear River

Company have had a great many suits and I do not always recognize the particular ones by the title of it, until I come to hear something of the case.

Mr Belcher. No statement of the facts has been made of this case or the points that were involved in it.

The Court. There is nothing material in it except to show that the witness was familiar with it.

Mr Badwalader. Now, I will ask you if you are familiar with that case of Richardson against Kerr in the 34 California.

A Yes sir I remember such a case.

Q. You are familiar with that?

A. Yes sir. It is reported in two places, in the 34 and the 37.

Q. I do not know that I have got the exact reference but you know the case?

A. It is reported in the 34

California page 63 and in the 37 California page 265.

2. I refer to the case wherein the doctrine of sic utere tuo was applied. There are two decisions: one in the 34 and one in the 37 California?

Mr. Belcher. I would prefer that you should send for the two, so that we can know what you are at.

The Court. It don't matter. We will consider what they are by-and-by. It seems to me that this is wasting time. I do not propose to pay any attention to the legal conclusion. It seems to me it is a great deal waste of time. Of course the fact that he has practised law and is familiar with mining litigation is sufficient.

Mr. Cadwalader. You are in the habit of advising your clients according to the Supreme Court decisions of the State?

Mr. Belcher. I object to that.

The Court. I can not see the

materiality of that. The only question is as to the value of his testimony.

The Witness. If permitted, I would say that my respect for the Supreme Court never flags.

Mr. Badwalader. What never?

A. Scarcely.

Q. How was it when the Drainage Act was upset?

A. I was more than satisfied with the decision; glad to get out of it.

Q. When, to Mr. Byne you spoke about the universal custom extending from Amador to Siskiyou, relating to using ravines and cañons as place for the discharge of tailings, did that oblige the miners to use any particular ravines?

A. No sir.

Q. It left them at liberty to select any places?

A. The practice was to use the adjacent and convenient ravines.

Q. They had the right to select

any, had they not?

A. Well, sir I do not recollect anything particular in regard to that. I was asked in regard to the practise. I say the practise was to turn the debris and water into the adjacent and convenient ravines.

Q. They were not compelled to do it, were they?

A. Oh, no sir: they were not compelled to.

Q. It was not compulsory upon them?

A. They were not compelled to mine at all so far as I know.

Q. When you spoke of the practise or usage or custom, you did not speak of any one that was compulsory, did you?

A. No sir, I simply spoke of the practise. I think I did not use the term "custom" at all. I understood from his Honor that it was scarcely admissible and I sought to avoid it and spoke simply of

the practise.

2. You did not speak of it in the sense of a law, did you?

A. I spoke of it as a fact and was not discussing the law at all.

2. Did you speak of it in the sense of a law?

Mr. Belcher. If the Court please, if that be allowed, then we can go into the examination the same way and we shall not object: but we raise the objection in order that it may be tested right here.

Mr. Leadwaler. The question I asked you, in speaking of the custom or practise in the working by hydraulic process is if you used the words in the sense of a law?

Mr. Belcher. I will make the objection again and simply for the purpose of raising the question. I make the objection that it is not material and is not in cross-examination.

The Court. I believe it was held

not competent on the direct-examination.

Mr. Cadwalader. Was anybody in those mining districts compelled to work their claims by hydraulic process?

Mr. Belcher. That is already asked and it has been answered.

The Witness. I do not understand you sir.

Mr. Cadwalader. Were miners compelled to work their claims by any particular process?

A. No, sir; they were in certain instances compelled, in order to comply with the laws, giving them the right to hold claims, to do certain work, but I do not call to mind any case where the written laws or customs required them to do any particular character of work.

Q. Work in any particular manner?

A. No sir, I remember cases where the mining laws provided that they should do so much work towards the development of their claims, and they were that kind

of expression; but I know of no case where it prescribed the ~~process~~ precise kind of labor to be performed for that purpose.

Q. Consequently, it would not have been a violation of any law there for a miner to work his claim just as he pleased?

A. No sir.

Q. Hydraulicing or drifting or any way that he saw fit?

A. No sir. I know of none.

Q. And instead of using the most convenient ravine, he might tunnel under two or three; might he not?

A. Yes sir.

Q. And making a discharge five or six miles off?

A. Yes sir, and very often did tunnel under, so that a comparatively remote ravine became the most convenient. The most convenient did not always imply the one nearest to him by any means.

Q. The practise, that you speak of, you said extended through different mining counties?

A. So far as my observation has extended I may say they were.

I, of course, was more familiar with that section in which I lived than with some remote ones.

2. As a matter of fact these hydraulic mining companies, as a general thing, tail into the deep ravines or streams; do they not — as a general thing the hydraulic mines tail into streams ~~and~~ long distance off from their mines?

A. Well, yes, they ordinarily do. They have long tail-flumes in which to collect the finer gold, requiring long tail-flumes and even undercurrents.

2. They have to be remote from the streams, do they not, in order to collect their gold?

A. They either have to be remote or conveyed by flumes the refuse matter into the stream a great distance before dropping it. In other words they require a long stretch of flume in which to properly wash and separate the

gold.

Q. There is no analogy between the modes of working mines on the ridge in the early methods of mining in Nevada County?

A. There is this analogy: The process of separation was by the water. It was in the application of the water, ^{that} they differed. In early days it was used without pressure.

Q. The hydraulic mines, as a general thing, are a thousand feet above the main water courses, are they not?

A. You mean the surface or bottom of them?

Q. I mean the surface, where they start in to work?

A. The surface of the hydraulic mines is usually very considerably above the water courses. It must be so or they could not get the fall.

Q. It is above all the natural water of the country, is it not?

A. No, not necessarily.

Q. Well, it is above all the nat-

-nral water necessarily?

A. If it was, they could not get water to them.

Q. That is not what I mean, that is above all the natural water courses?

A. No sir, it is usually above the level of the water courses at the point or the place where the mine is situated.

Q. Of course I meant that. That is, they have to be worked by artificial water?

A. By water brought by artificial means to the drain.

Q. Well, that is called artificial water, is it not — you understand what I mean?

A. Yes, sir, I understand what you mean — it perhaps may be so termed. It is natural water, though, I think.

Q. And this had been going on since 1865, as you said to Mr. Byrne yesterday?

A. Mining or this particular kind of mining?

Q. This particular kind of mining.

A. Well, it has been going on since mining by what we term the hydraulic process commenced: which, if you termed the process, hydraulic from the time they commenced using pipes and hose, commenced in 1853 or 1854.

Q. That is not what I asked; but, from the time they commenced using monitors?

A. Monitors did not come into use until 1865 or even later I think. Before that we used the Goose Neck, inferior to the Monitor.

Q. When did they commence using powder in large quantities?

A. Well, it would be difficult for me to state. They used considerable of it, say in 1853 or 1854, in different localities, of course at different times.

Q. That is not what I asked; when did they commence using powder in large quantities?

A. In 1852 or 1854 is the first I call to mind when they were using it in gravel mines. Of course in quartz mines they used it whenever they began to work them in 1853 or 1854 at various times. They used powder largely running bed-rock tunnels, and so on; but if you mean, when did they first commence using powder to lift the gravel -

2. Yes sir.

A. That I should think was somewhat later. First in a small way in blasting up "chunks" as they termed them or large pieces of pipe-clay; and later running in drifts and galleries and putting in powder and exploding and blowing up the whole bank - Really now I could not tell within a good many years perhaps, when I did first know of that.

2. Well, since 1865, was it not?

A. I should think it was as

late as that; it may have been earlier, and perhaps not as soon as that.

Q. You divided the history of mining, in your county, into two parts; did you not? — running from 1849 to 1865, and ~~another~~ from 1865 to the present time?

A. Well, perhaps the division was made for some purpose and it might be done so.

Q. That was the way it was done in the books was it not?

A. No sir, I do not know that it is particularly; I do not call to mind any particular division making it just that time; about that time hydraulic mining developed into a separate process and more distinguishable.

Q. It became very distinguishable?

A. Yes sir, it is a distinct method or application of water from that before in use.

Q. So much so that the leading

writers got to treat of it as one of the things modifying the face of the earth by human action?

A. It certainly does modify the face of the earth. All surface mining does: and that does it more rapidly than some other.

Q. Well, George P. Marsh, in his celebrated book "The Face of the Earth as Modified by Human Action" means it?

Mr. Belcher. He never saw a mine.

Mr. Cadwalader. He can't see it with earthquakes and volcanoes, does he not?

A. He may well do so.

Q. He could well do so?

A. It is on a small scale compared with the action of volcanoes and earthquakes perhaps, but it might with propriety; and I should not be surprised at his so doing.

Q. It is really moving mountains to the sea? Is it not?

A. Yes sir, without any miracle

too.

Q. You were asked in regard to the hardness or the softness of the material in the North Bloomfield claim? Do you know the duty performed by a miner's pick on water there?

A. Well, very approximately.

Q. About $3\frac{1}{2}$ yards, is it not?

A. No sir, I think it is about two $\frac{1}{2}$ yards, at least such has been my information — from two to two-and-a-half.

Q. Is it not about 3 to $3\frac{1}{2}$?

A. Well, it is possible, but I think not so.

Q. Have you any knowledge on that subject?

A. Well, some knowledge. I have frequently conversed with men working and have seen them at work; and I have been at the mine and have seen them working and have judged as far as one could by the eye; but that would not amount to very much. Really, the most of my information comes

from what they have told me at different times.

Q. How high are the banks there?

A. I should say 150 feet.

Q. Are they not 400 in some places?

A. Perhaps they are as high as that. I think they are not so high where they are at work at present.

Q. They have four hundred-foot banks there, have they not?

A. I would not think they were as high as 400 feet at any place; but it is possible there may be; that is my impression.

Q. Is not $\frac{3}{4}$ of all the mining done on the Yuba River, done by four companies?

A. No sir.

Q. I will ask you whether $\frac{3}{4}$ is not done by the North Bloomfield, the Milton, the Excelsior and one other company.

A. Well, $\frac{3}{4}$ — do you mean upon the whole Yuba River is or in the locality where

they are situated?

Q. Whether they do not use more water ^{than} ~~out of~~ all the other claims combined, the Eureka Lake and Yuba Canal Company? A. Yes the Excelsior and Milton the Eureka Lake and Bloomfield—Mr. Belcher (Intg.) This is not cross examination.

The Court. I understood you went into the question of the quantity of mining there, the amount of mining?

Mr. Belcher. But they are undertaking to prove that $\frac{3}{4}$ of it is done by four companies.

The Court. I suppose that is with the view to get at the aggregate amount.

Mr. Belcher. If with that view we should not make any objection.

The Court. I suppose that is it. I do not see any other object.

Mr. Belcher. I do not think that is the object that the gentleman has in view at all, but if he will state that it is

I will withdraw the objection.
Mr. Cadwalader. That is all.

I have no other view. I will ask you whether $\frac{3}{4}$ was not done by four companies?

A. I should think about one half of it, within those limits, is done by the four companies you mentioned. There are seasons of the year when they are doing nearly, if not quite all of it. There are other seasons of the year when they are not probably doing more than a third ($\frac{1}{3}$) of it; but they in fact run some months in the year than most of the other companies. While there would be 100 companies running a little while, I should think a company the year round—they do fully half of it.

Q. I would ask you whether they have not got $\frac{3}{4}$ of all the water?

A. Yes, I think they have.

Q. If they have $\frac{3}{4}$ of all the water, they must do $\frac{3}{4}$

of all the mining, must they not?

A. No sir, not by any means.

Q. Why?

A. By all the water I mean that which is brought in by artificial means. There are 2000 ravines furnishing water during a few months in the year in which miners work and the waters of which they use. Of the water brought in those companies, if you would add the South Yuba Company, they bring the great bulk of it, almost all of it.

Q. Two of these companies, out of the five million inches, use two million, do they not?

A. What companies do you refer to?

Q. The North Bloomfield and the Eureka Lake?

A. I should think they certainly must use at least two million. I would suppose much more.

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Q. Well, that is $\frac{2}{5}$, is it not?

A well, it is $\frac{2}{5}$.

Q. Do not the Milton and the Smartsville mines and the Blue Tent use considerably over a million?

A. I would suppose they did.

Q. And a million and a quarter?

A. I should think they did.

Q. Well, then you would have $\frac{3}{5}$ would you not - more than $\frac{3}{5}$?

A. I would have $\frac{2}{5}$ of a given sum; I would not have $\frac{3}{5}$ of the water used for mining.

Q. Why?

A. Because of the great bulk of water which falls and passes through ravines and smaller streams contiguous to that mining region, the water is used by the miners, and passes away into the streams and no record is made of it and in assessing no estimate could be obtained.

Q. That water could be utilized by these hydraulic mines because you say they are

above the adjacent natural water course?

A. Yes sir, above those in their immediate vicinity.

Q. They could not be utilized then, that water could not be utilized by them at all?

A. That water is utilized at points where it can be.

Q. How?

A. Sometimes by locating shallow plains in the ravines and working them on each side; sometimes by locating on the hill and going to the ravine above and cutting a little short ditch, a comparatively small one, which will afford water a month in the year or two months or three months, what we call wet weather ditches, and thus getting the water and using it upon ground for a short time. During the flood period, the water of most of the ravines in the upper part of the county is used for mining purposes.

Immediately above Nevada the surface has been so denuded that it is no so much used now.

Q. That is your explanation, is it?

A. Yes sir. I say a great deal of the water used for mining there is no record made or kept. The assessor's record showed nothing of it.

Q. Let me see whether I understand you? Your mines on the Yuba have $\frac{3}{4}$ of all the water.

A. If you so understood me you understood me wrong.

I said that four mines, in my judgment, used $\frac{1}{2}$ of the water, that is brought in by artificial means and more too.

Q. Well, if it was more too, it might be $\frac{3}{4}$?

A. Well, it might be, but I do not think it is.

Q. And they do fully $\frac{1}{2}$ of all the mining on the Yuba?

A. I think they do fully $\frac{1}{2}$ of all the mining; that is, the mining that tails into the Yuba, because they run some nearly the whole season.

Q. Well, there is a great deal of mining, there are a great many mines in Sierra and Plumas Counties that tail into the Yuba; are there not?

A. None in Plumas County that I call to mind; there can not be; but in Sierra County, there is.

Q. Where is Shady Creek?

A. Shady Creek is in Nevada County. It empties into the Yuba.

Q. Mr. Belcher. Let me suggest to the Judge that Laporte is in Plumas County.

The Witness. Laporte is in Plumas. At the time I was most familiar with it, it was in Sierra County. But they have changed the line so that perhaps — let me see where the

line is there — yes, there are a few miles there, a little strip two or three miles wide.

Mr. Cadwalader. There are a great many mines there, are these not? — or do you know?

A. Well, let me think a moment just where the line comes. I know of mines in that section.

I. There are 40 or 50 miles of the Yuba River of some branches of it in Sierra and Plumas.

A. There is 40 or 50 miles. There must be a great deal more than that in Sierra. There are a few miles I should say of slate creek that comes within Plumas County not exceeding four miles of it.

I. Howland Flat and Saint Louis.

A. They are in Sierra and Gibsonville is in Sierra. The line strikes across at little Grass Valley, striking it I recollect right slate creek and runs up 3 miles and then strikes back to the dividing ridge

between the waters of the Yuba and South Feather, leaving Gibbonsville in Sierra County and Howland Flat and Hesperdarn.

Q. You say these large hydraulic mines could not be worked by this hydraulic process tailing into the Yuba?

A. I say they could not be worked by the hydraulic process without tailing into the Yuba or its contiguous streams.

Q. You mean by that it could not be worked profitably?

A. Yes sir. That is what I mean. I might go further and say that they could not be worked by hydraulic process at all, without it. It is not possible. There is not fall enough to tail anywhere else.

Q. Well, they could be worked as drift mines, could not they?

A. Yes sir.

Q. They have rich material at the bottom?

A. Some of them have rich

material in spots; some of them the bottom is no richer than the top; they vary a great deal.

Q. You said to Mr Byrne - that you were in Sacramento here in early days?

A. I did so state.

Q. And that picture (referring) was a true one?

A. No sir. I said it fairly represented; I do not think it is true in every particular.

Q. When you were here in the flood of 1850, I will ask you if business did not go on as usual during that week of the flood?

A. No sir.

Q. On 2nd & 3rd streets?

A. No; the principal business here was wrecking and drinking whisky during that week, unless that may be taken as the usual business.

Q. Don't that picture there show that oxen ~~was~~ are wading around and horses with the

water not up to their knees?
 A. Well, it is possible that it
 shows even there. I did not
 notice particularly.

Q. Was the water more than
 2 feet deep at any time along
 "J" street.

A. Yes sir water was six feet
 deep in "J" street. There were
 points where there must have
 been holes in "J" street
 between First and Second - there
 was a hole on the north
 side of "J" street where
 there had been originally
 a slough across there and
 the street probably was filled,
 part of the width of it, but, on
 the north side there was a
 spot there, at the time of
 that flood which must
 have been many feet deep.
 I do not doubt but that the
 water was 15 feet deep in it.

Q. Do you recollect about the
 slough?
 A. If it had
 been a slough it had been
 partially filled before I saw

it, but I judge though that it had originally been a slough; it extended through the block.

Q. Yalke "J" street, Priest, ^{Lee} ~~Law~~ and Company's corner, where Mills' Bank is, now the water was not more than two feet deep there?

A. Priest, ^{Lee} ~~Law~~ and Company's corner, at the time I first knew I think it was over on the other corner.

Q. No, it was where Mills' Bank is?

A. Priest, ^{Priest, Lee} ~~Law~~ & Co. when I first knew them were on the corner of Second and J on the north side.

Q. On the south side?

A. On the north side, as you go down "J" street after crossing Second on the right-hand side in the wooden building standing up very high from the ground.

Q. I don't make any difference which side it was on, but they you are mistaken about.

the side.

A. Well they were at that point - but I think I am not mistaken.

Q. How deep was the water there?

A. That would be at the corner of Second and J.

Q. Yes, where Mills' Bank is?

A. Well, I have no particular recollection in regard to it. I do know over at the other corner of Kand Second.

Q. Don't you know that the Placer was not more than 18 inches higher than J street?

A. I did not know at that time, do you mean, or now?

Q. Well at that time?

A. Oh, I think it must certainly have been more than that, higher than J street; because water was several feet deep in J street - I don't think it was more than two feet higher than J street, right - adjoining it; it rose gradually. J street ran along the base of it.

Q. There was no water running

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over the river bank, was there?

A. Yes sir.

Q. How much of Satter's Fort was ~~out~~?

A. All of it.

Q. How much higher was that than the river bank?

A. I do not know; I never took any levels.

Q. You were here how long?

A. I was here - I came back from the mines about the 15th or 20th of December and remained here until after March, I think; that is, I was away in that interval perhaps at the Bay, before that time.

Q. How long was the business interrupted in this city during that January Flood?

A. That would be a hard question to answer.

Q. Did not teams come in?

A. No sir, not during the flood. As soon as the water subsided they came in.

Q. Didn't it subside in a few days?

A. I do not think it subsided so teams got into

the town and about the town, to amount to anything for say, two or three weeks. At the end of a month there was still water in portions of the town. There was a slough a little above that mound that we spoke of, that we ferried one month after.

Q. Now you recollect anything about the rains of 1844 when they commenced and when they ended?

A. Yes sir, some of them.

Q. When did they commence?

A. The first rain of 1844 where I was was a light rain; it was on the road between Weaverville near where Hlangtown was, what was then called Hlangtown, on the night of the 12th of October - I think it was either the 11th. or the 12th.; that was a light rain. It did not rain again until about the first of November, I would say and it came on and rained a couple of weeks,

what then seemed to me very hard, and then it cleared away and was as beautiful weather as I ever saw until, say the 15th. or 20th. of December, about the time I came back here from the mines. While I was up mining, there was some as beautiful weather as I ever saw. About the time, I think it was that I came back, it began to rain until the 15th. or 20th. of December and then it rained very hard for 30 or ⁴⁰ days. I will ask you whether it did not rain all the month of November, all the month of December and all the month of January?

A. No. It did not rain all of the month of November. It did not rain all of the month of December. I am not sure; but it did rain all of the month of January. I know we had a talk that there was 40 days of rain but I do not remember just when it commenced; that is, the 40 days; but it rained some every day.

Re direct Examination of Hiles Searls

Mr Byrne Q Do these large Companies of which you spoke as having some one half or more of the water brought in by artificial means use all their water upon their own mines?

A No. Some of them do and some of them sell water.

Q To what extent do they sell water to other mining Companies?

A The Eureka Lake Co. sells a very large amount of water; at times sells perhaps half its water, at other times but little when water is abundant it sells water to considerable extent when there is demand for it when there is no demand for

is from others they use
is themselves

Will you name some
large mining claims which
have not water of their
own and which pur-
chase water from these
other mining Companies
or ditch Companies?

The Yuba Still Company
had no water of their
own. The Blue Dent has
had no water of its own
until a comparatively
recent period. They have
constructed a ditch and
have one now. The Man-
zanita Company constructed
a ditch within the last
18 or 20 months and had
a small one before that,
a wet weather ditch
they called it. The
South Yuba Company sells
all its water. The South
Yuba Company does not
run any water, unless
there are mines which

the South Yuba Company
supply at You Bet
They belong to a separate
Company, a separate
Corporation

Mr. Adwalader You are
not called on to make all
these conjectures. You
say "unless", "if" and
"but" -

Mr. Byrne He is answering
my question.

Mr. Adwalader But he
says "unless" "if" and
"but"

Mr. Byrne I do not think
he said "if" and "but".

Mr. W. C. Belcher Well these
are proper English words.

The witness If Mr. Ad-
walader is through I will
go on. The South Yuba
Company sells most of
its water to other com-
panies; does not run
mines of its own unless
it has recently united
with the Corporation

owning the ditch, the property of another Corporation at You Bet which owns mines which mines the South Yuba Company has supplied. They talked of uniting the two Companies; I am not sure whether they have or not. That is what I meant by the term "unless"

Q It is perfectly proper that you should make that statement. From what source are the mines at Moore's Flat supplied with water? That is to say those hydraulic mines there. Do they own water, have ditches of their own, or purchase water?

A They purchase water from the ditches

Q From one of the Companies which was mentioned by Mr. Caldwell?
A Yes.

Q How as to the mines at Snow Point?

A The Snow Point mines have all of them purchased water until about one year since, when the Eureka Lake Company came to own a mine there of its own and has been running water to its mine.

Q How as to the mines at Relief Still?

A At Relief Still most of the mines that have been running have purchased their water.

Q Do you know of any extensive mines in the neighborhood of Sweetland which purchase water?

A Yes the mine formerly known as the Sweetland Creek mine.

Q The old Buckeye mine?

A Yes it embraces the Buckeye and perhaps some others. It has passed

into the hands of some parties. They have always been buying water. It is now running and purchasing water. That is where there is water.

Q Speaking of the Blue Tent mine did you state that that was in Nevada township in your examination yesterday or did you mention that as one of the mines in Nevada township? A I did not. It is within the limits of Nevada township. I would say, that in mentioning the mines of Nevada township yesterday I overlooked the fact that the Blue Tent and Sailor Flat mines are within the exterior limits of Nevada Township.

Mr. Adwalader They
 run into the Yuba do
 they not?

A Yes. They are without

The three mile limits I
 fixed but within the
 limits of the Township
Mr Byrne & Ston extensive
 are they? A They are
 large mines both of
 them. The Blue Tent
 Company runs from 2000
 to 4000 inches of water
 I think

Mr Badwalader I do not
 want to interrupt you
 but they tail out of the
 township do they not?
 And. The river is the
 township line

Q They tail into the
 river? A They tail
 into the river which is
 the boundary of the
 township

Q That would take in
 but half of it?

A They tail in on the
 township side. We sup-
 pose the thread of the
 river is the line. What
 ever goes over that is beyond

the line

Mr Byrnie In answer to a question asked by Mr Cadwalader you stated that at least 1000 men would be thrown out of employment by the stoppage of the mines on the ridge? Also.

O How many in your opinion would be deprived of employment from the same cause throughout the entire County of Nevada?

Mr Cadwalader We object on the ground that the defense have already gone into that with this witness

The Court I hint so but the witness may be asked again.

Mr Byrnie Speaking of the ^{entire} County the mines of the entire County?

8686 O K O you mean the men who are actually

engaged in working the mines?

Oyes. I mean employed in connection with the working of the mines; not perhaps breaking boulders but in any other occupation connected with mining?

A It is a more difficult question to answer than might be supposed for the reason that there are so many men employed in connection with the mines who are not directly digging earth, as for instance clearing off the timber ahead of them, cutting blocks and putting into the flumes and all that sort of thing but were I to include the number of men in the County who are engaged in the mines, either digging dirt or immediately in connection with them, I

should pay at least 2000;
2000 I would say within
the limits of the County

Q Are those men usually
men of family, having
wives and children?

A Largely men of family
Q Permanent residents
of the County having homes.

A Mostly permanent
residents of the County.
The laboring miners of
Nevada County today are
as permanent as other
citizens generally are

Q You spoke of the
County of Nevada and
perhaps other mining
Counties having been to
some extent depopulated
by the exodus to Fraser
River. Let me ask you
what is the fact as to
the return to the same
localities of a large
proportion of that popu-
lation ~~that~~ went away?

Mr. Caldwell A

object to that question on
the ground that it has
been gone over with this
witness. She stated the
relative population before
and after 1865

The Court I think he
stated the relative popu-
lation at the different
times which is sufficient

Mr. Byrne: I'm states that the mining rules differed somewhat in localities in details. I will ask if they were substantially the same in their main features?

A Yes, they were in the main. That is to say they were for the most part rules governing the size of claims, the kind of notice that was to be given on locating them, the manner in which their boundaries were to be designated and the amount of work requisite to hold them. That was about the substance of it.

Q. How about this practice of which you have spoken. Was it different in any of the different localities, or was it common and general?

A To what practice do you refer?

Q. That of dumping into the streams?

A. I know of no variation from that.

Q. You were asked in reference

to you your knowledge of several mining decisions that were mentioned here? a. Yes.

Q. Are not there many other mining decisions, or decisions, upon the subject of mining contained in the California Reports with which you are familiar?

Mr. Hart. We object to that as being a matter of which the Court is as well aware probably as the witness.

The Court. I think the witness may explain.

Mr. Byrne. Are not there many other decisions with which you are familiar?

A. There are a large number of mining decisions with most of which I not only ought to be familiar but I think I am. I think I am pretty familiar with the mining decisions of the State.

Mr. Cadwalader. I want to ask you one question. What do you know as to the elevation of those reservoirs? a. What do I know of

Chem ?

2. No. Their Elevation ?

A How high they are ?

2 Yes ?

A Well without looking at the map or any other data just now I would say 6000 feet at any rate - about that

Testimony of J. G. Blanchard.

Called for deft.

I swear

Mr. Dibble When did you come to California ? A. I arrived at Placerville at the 4th of August 1850

2 Where did you settle ?

A I settled mostly at Placerville

2 Has that been your residence since 1850 ? Your main residence ?

A No. It has been my residence constantly since 1854, but formerly my residence, my main residence was at what

was called Mud Springs

Q When did you first visit Sacramento?

A I came to Sacramento about the 26th day of August first

Q What was the condition of the City at that time?

A It was a trade center to supply miners. The miners trading Center

Q When did you first engage in the business of mining and where?

A On the 6th day of August 1850, at Live Oak Bar on the South Fork of the American River about three miles above Coloma

Q How long did you continue in the business of mining?

A I continued in active working of mines myself, making a haul, until about 1853, and have been engaged in it from 1850 up to the present time and am at this time owner of mines and more or less engaged in it, though not a worker of mines

2. What kind of mining did you first engage in?

A. Called Bar mining on Deer Oak Bar on the South Fork and to some extent bank mining on the same bar.

2. What were the principal kinds of mining in Eldorado County at that time?

A. It was bar mining, bank mining and placer mining. Some flats, a few flats were worked.

2. In speaking of bar, bank and bench mining, do you refer to river mining?

A. In speaking of bar, bank and bench mining, I refer to river mining.

2. How was that kind of mining conducted?

A. In 1850 it was conducted by carrying the surface of the bar to the banks of the river and washing it in rickers. I would also say in the connection, that after leaving the bar, I went to Nevada and mined at Gold Run in Nevada County from

September 17th 1850 up to about the 1st of April 1851. I ran the level on Goose Run, what was called at that time a level, running in, draining Goose Flat.

Q What became of the mine displacement in the river?

A The lighter material of the displacement was washed down river, it was all thrown into the river.

Q What became of it with reference to lower claims on the river?

Mr. Hart. What is the object of this?

Mr. Sebble To show what the result was.

Mr. Hart. We object to what became of it with reference to lower claims on the river as being irrelevant.

Mr. Pryor. It is for the purpose of showing the practice.

Mr. Hart. If it is for the purpose of showing the practice I object to any further testimony on the subject, and

ask The Court at this time to limit the Counsel on the other side to the number of witnesses already sworn. There have been a number sworn on that subject. One thing I want to say why that limitation ought to be made is, that we complain of this case that that is their custom, but we say that that is an illegal custom. We claim that they do wash the material into the stream by the means of water and there will be no testimony in this case which will tend in any degree to show that they do not do that.

Mr. Dibble It is the first time in thirty one years that it has been questioned as to its being the custom and we want to prove it now.

Mr. Hart. They have already proven whether that was the custom or not. Now whether that was a legal custom or not, or gives them any right,

is a question of law
The Court. If there is to be no
 different testimony in regard to it,
 there is no use of wasting time
 on it.

Mr. W. C. Belcher We have the
 Counsel for Plaintiff for ad-
 mission which will cover this
 very point if they will make
 it. In that case we do not
 need the testimony; otherwise
 we do, to show that there was
 a custom; and a custom may
 control although another party
 may be injured by it. We
 propose to prove it to the ex-
 tent that it shall be a lawful
 custom prevailing and controlling
The Court. Do you propose to show
 it in any other way than
 that it has always been done.

Mr. Dibble Not only that it has
 been done, but also that it
 was a positive necessity and
 mining could not exist with-
 out it.

Mr. Hunt. They have already
 proved that. We are not

admitting anything. But we say that the proof on that question is now sufficient to establish what they claim the custom to be, and that it is not our intention to introduce any proof on that subject.

The Court. So far as the practice of throwing the material into the nearest ravines and rivers is concerned, it seems to me it was established by the very first witness who was examined on the mining on the bars. And General Oast says that he does not intend to introduce any testimony to contradict the practice.

Mr. Belcher We would like to consider on the matter a little before urging it further and will proceed to other matters at present. Before this witness is disposed of we will decide whether to urge it or not.

Mr. Dibble In locating a place, gravel or other mine what considerations were had

Mr. Hunt. We object to that as immaterial

Objection overruled

A. The first consideration is the location of a mining claim is dump, because no mining claim can be worked without a place for the tailings and material that is washed off. The mining is all done by water and water must run. The next consideration is water and hay in the claim

Q. I understand you that no mining can be done without a dump? A. None

Q. What do you mean by dump with reference to other and other claims below?

A. I mean by dump, a place to wash the tailings. A place for the tailings to run

Q. Did you have occasion to see the South Fork, Middle Fork and North Fork of the American River in 1850 and 1851?

A. I did. I visited all those streams in 1850 and 1851 and 1853 particularly: the South Fork of the American River from Sacramento to the junction of the North Fork and the South Fork and from the South Fork to Moses Station up on the toll road, and from the North Fork up to Lyons Bridge, and from Lyons Bridge in the Middle Fork to the Boston tunnel opposite Volcano-ville.

2. What was the condition of the water in the forks in 1851?

A The streams were muddy from mining. The banks of the streams were lined with miners from one end — from Negro Hill, below Negro Hill up here below Folsom. The first mining was done at Mormon Island.

Q I am speaking of the condition of the River, the water?

A It was muddy

Q How many miners were working on the American and its forks in 1850-1-2-3-4?

A Outside of the tributaries of the American — the three Forks

Q The American and its Forks?

A I should say 12000 men — perhaps more.

Q What was the amount of displacement to the main
A on the bars and banks of the River I should say that a man would dis-

place probably ten cubic yards. On better ground a days work ought to be about from 15 to 16 cubic yards, That was considered a days work I believe to a man.

Q How many days in the year were these 12000 miners work?

A Well sir they were in the habit of working the working days - I should say 300 days at least.

Q Outside of River mining that you have referred to how many during the years 1850-51-52-53-54 were mining in Eldorado County?

A Did the other question include Eldorado County only or the banks of the River. In Placer County there was the town of Rattle Snake bar which had 2000 inhabitants. I included that in my first

estimate and Poverty bar,
 Q That was in answer to my former question?

A Yes. I should say outside of the River Mining in Elanado County - I should say there were 12000 men at work, 10,000 or 12000 perhaps 15000.

Q What Kind of mining were they doing outside of the River Mining?

A Working the Ravines Creeks Flats depressions - working out the Natural sluices of the Country.

Q In what direction did the material go?

A It was all dumped into the nearest and most convenient ravine and Creek and then to the mine.

2 What amount of material was displaced to a man?

A From 12 to 15 cubic yards Johnes says per diem

2. On an average how many days in a year did those

Miners work? A About 300

2. What became of that material?
A. It was washed into the ravines and creeks and the lighter material I suppose went into the American River and the sands came to Sacramento and passed

2. What was the effect of the flood of 1861/2 referred to in this case upon the tailings?

A The effect of the flood was to wash down or to level off the banks of tailings. I have seen tailing banks 10 - 15, 20 feet high where they would be thrown up by the sluices and the floods of that year levelled them all off leaving the coarser material near the dump. The sands and finer material washed off down into the streams and so on down.

2 State how many men were mining in Placer County upon the rivers?

A At what time?

2 In 1850-1-2-3 down to 54?

A. I visited it in 1851, An-
burn and vicinity - Yankee
Juni, Forest Hill, Michigan
Bluffs Iowa Hill and the
section of country naturally
traversed in going from one
place to another and Ishmed
says in Placer County in 1851
there were from 15000 to 20000
men at work, perhaps more

I know in 1852 and 1853
and 1854, how many?

A. In 1852 nearly as many
In 1853 and 1854 they prob-
ably might have fallen off
 $\frac{1}{4}$ or $\frac{1}{5}$

2 What was the displace-
ment to a man?

A. The diggings in Placer Coun-
ty those of Forest Hill,
Yankee Juni, Iowa Hill, and
the Canons etc though there,
have a deeper vegetable
mold or earthy matter than
most places in El Dorado
County. And Ishmed says
the displacement to the

man in the series generally
in Placer County, except
those down below Auburn and
along Auburn Ravine and
down then by Lincoln, would
be more than in El Dorado
County - I should say 15
cubic yards would be a fair
estimate.

2 Into which fork of the
American River did that
remove go? A. The
diggings from Iowa Hill, Da-
masco, Last Chance, Michi-
gan Bluffs, and Forest Hill
- Michigan Bluffs and Forest
Hill went into the Middle
Fork. Iowa Hill and Auto-
mine Cañon would go into
the North Fork. Todd's Valley
and the diggings of Sarahville
or Bath and the different
Cañons and Ravines would
empty into the Middle
Fork. And the diggings be-
low Lyons Bridge, that is
at the junction of the Middle
and North Forks of course

owned flows into the North Fork.

2. What kinds of mining were done in Eldorado County from 1862?

A. There was river mining, bank and bench mining, ravine mining, creek mining, flat mining, placer mining and some by dravlic mining according to the early process of hydraulic mining. There was some hydraulic mining as early as 1854 in Eldorado County.

2 Since 1862, what has been the character of the mining?

A. It has mostly been from deep diggings - hill diggings - the ravines having been worked out and some flat mining.

2 How about quartz and seam?

A. Quartz and seam diggings, yes. There is a large mining industry now in seam diggings - quite large in the neighborhood of Greenwood, Georgetown, Georgia Slide, Poverty Point,

and places about Mud Springs
 Q Since 1861 what has been
 the population of El Dorado County
 dependant upon the mining
 industry

Mr. Hart. I object to the ques-
 tion on the ground that it
 is incompetent, irrelevant
 and immaterial

Objection overruled

A. I should say from 15,000
 to 18,000 perhaps at that
 time. Now, for instance, there
 are not that many. There
 has not been for the last
 several years that many

Q How many figures now?

A Well, I would say in 1861
 probably 15,000 and 1870 it
 would be $\frac{1}{4}$ less

Q What now?

A Well, probably 10,000.

Q Compare the mining remove
 prior to 1862, at the time of
 the great flood with the
 mining remove from 1862 to
 1870 and state the result

A. It would be 13 years

Against 10. I should say there was at least 50 times, the amount removed

2 When? A Prior to 1862 there was ~~for~~ ^{more} ~~as~~ ^{than} 50 times as much than from 1862 up to 1870

2. Compare the mining remove prior to 1862 at the time of the great flood with the mining remove from 1870 up to 1881, and state results?

A The ravine mining and the surface or hill mining was pretty much all done prior to 1870. There was at least 100 times, more than 100 times.

2 When? A. The amount of earth removed from 1849, or from the discovery of gold, up to 1862 to what there was from 1870 up to now was say 100 times

2. Compare the density and movability of the material removed up to the time of the great flood of 1862 with the density or movability of

The material removed since 1870 and up to the present time and state present - density and movability?

A. The earth removed from 1848 up to 1862 mainly was, what is called the shallow diggings, varying from a foot and a half to 20 or 15 feet deep of the vegetable mold upon the gravel. There would be for instance, if it was a foot and a half - there would be a small portion that would be heavy gravel. It would simply lay on the bedrock and I should say 90 perhaps a greater proportion of the material would be the light material that would float off. That mined since 1870 from the chief diggings is more dense. It is gravel and boulders and 80 or 90 per cent of it remains upon the dump as shown by the different hydraulic diggings in El Dorado County now

2. What per cent will reach a point 30 miles carried by the river current - 30 miles distant from the dump.

Mr. Hart. I object to this witness testifying on that Subject until he shows that he is acquainted with the rules governing the amount of material that water will carry in suspension

Mr. Dibble You are a miner?

A. I am a lawyer, that is my business, and has been for a great many years.

2 Engaged in mining?

A Yes, Engaged in mining all the time

2 Worked in flumes?

A Yes. Plumed River, worked with water, worked with hydraulic mining, shovelled into sluices, worked with a long tom, and worked with a cradle

2. Are you acquainted with the flow of sediment in water?

A Yes, I have seen it flow

months and months

2. Answer the question
Mr. Hart. I object to it. I
would like to ask the certifiers
a few questions.

2. Do you know anything
about how rapid a current
must be, in order to carry
material in suspension of
a given weight?

A If you will give me your
flow, and give me your ma-
terial, I will give you my
opinion as to whether a cer-
tain grade of a flume will
carry off certain material.
I will tell you what grade
a flume for instance will
run a certain grade of gravel
and about what grade it
takes to run the vegetable
mold or loam that lays
on the surface. As to the
mechanics or a computation
of the velocity of the water
I have very little knowledge
of it. It is simply a matter
of experience from 1850 to now

with ditches and with
mines and with the flow
of water and sediment
flowing in the water
— necessarily coming in
contact with ditches all
the while and I have
been Attorney and am today
for the different Ditch
Companies in Eldorado
County, the California Wa-
ter Company, and Eldorado
Water and Deep Travel
Mining Company, and the
Park Canal Company and
other ditches and I
have had a great deal
to do with litigation
in relation to water
and have seen a great
deal of it and also
ways in these disputes
I would go upon the
ground myself and
saw what the facts
were

Q- Are you sufficiently acquainted with the laws governing hydraulics to be able to determine the velocity of a stream from its depth and its grade?

A- I might be conceited about it. I would not defer my judgement to that of anybody that I know of as to the velocity of a stream.

Q- Do you know of any formula by which that can be done?

A- No Sir. No formula whatever.

Q- You do not know the law as laid down in the books?

A- I have heard expert witnesses testify in relation to the law and I have read it and all that sort of things but I do not pretend to understand it. I have heard - I have read it. The books lay down a certain formula but I never charged my mind with it so as to be able to state now what these different authors state in relation to the velocity of water or the capacity of water at a certain velocity to carry

certain material, of a particular denseness - that is what will carry a solution of pulp and what will carry coarse and fine sand and different kinds of sand.

Q- Do you know whether or not there is any rule which determines that water running at a certain velocity will carry material to a certain distance and drop it and whether or not that material will afterwards be picked up by a current of the same velocity and carried on - and carried on as fast as the water of that water finds it - as often as it finds it lying in the bed of the stream? A- I have heard that there were such rules but I do not believe in them at all. I do not believe in anything of that kind. I believe in the actual experience of a thing - what a man sees and knows. It must greatly depend on the character of the stream and the impediment that the sediment meets with on its

way down. For instance the South Fork of the American River is full of boulders and full of benches and benches and all that sort of thing and I do not believe any scientific man with his book can tell where the sediment would be dropped on any five miles of the South Fork of the American River. He never could satisfy me that he would know anything about it.

Q- In order to ascertain what you think about it I will ask you if it is not true that water running at the rate of 20 miles an hour would sweep a stream clear of sand and carry it until the water had reduced itself to a very much lower velocity - a very much less velocity?

A- I do not think there can be any rule in relation to it because the kinds of sand we find in all of these streams coming from all of our mines

are entirely different. There is a black sand which is very heavy but the lighter sands - for instance sand made from that rock (pointing) would be comparatively light compared with some other sands, And there is a white stone which predominates to a certain extent in the mines of El Dorado County that dissolves -

Q (Intg) In quartz mining?

A - No Sir. In gravel mines. That water would carry a much greater distance than it would the heavier sands. If you will tell me what kind of sand I could tell you.

Q - Well I will take a cobble-stone as big as my fist?

Would not water running 20 miles an hour carry that a great ways in suspension? A - I do not think

any water would carry a rock, a clinker or a quartz rock as big as your fist in suspension unless it was

bouncing over a fall or it should strike a rock and go on. I think it would strike the bottom of the stream. A rock as big as your fist I think would find its resting place very quick.

Q- As I understand you you do not believe in the laws controlling the operations of water upon suspended matter upon matter in suspension in the water as laid down by Scientific men?

A- I do believe it implicitly, but I say their basis is upon water running on a certain plane and that would not apply to our creeks and cañons which have sharp turns and where there are immense boulders scattered all across which form eddys and whirls and all that sort of things. The calculations laid down in these books is no doubt correct. I believe them to be correct as a matter of course.

Q. Did you learn from these books or from any mining expert or from any expert or from any experience that the amount of material carried in suspension in water depends upon the course that the water is taking?

A. The course—whether it is running east or west or north—

Q { Intg } Whether it is running straight or crooked?

A. I understood that these books are based upon calculations and to a certain extent upon experiment and that these experiments were carried on, on a place and not upon the thread of a particular stream. Now the South Fork of the American River is a wild stream and it has its narrows and its meanders. The water is sometimes 150 feet deep and it carries trees five or six feet through. Above Licks Station—I suppose you know where that is—a slide came in four or

five miles long and it dained it up some seventy feet and then it came whirling and tumbling down very furious. It is perfectly marvelous and I do not believe there is any man that can tell how far the water in the American River of that stream as it is running will carry a certain character of material in suspension. I believe it is impossible.

Q. That ends the whole question then. If nobody can tell it I have no farther examination to make?

A. The reason why I think so is because the river is filled with large rocks some as large as this room and there are bends in it and bars and the character of the water running is different all the time. In floods there are whole trees going down and where it strikes are of these big boulders in the stream it forms an

eddy below and there is a whirl
in it. In 1853 - that is why I
base my opinion - I cut three
million of logs just below
Morris Bridge on the South
Fork and I undertook to run
them down and I made a
contract with old man Nye
who owned a saw-mill near
this flouring-mill here, at
that time and I followed up
the banks of the river during
the floods of 1852 and '3 - it
was a low flood, I had during
the low water gone up the
stream with an experienced
log-man and we had concluded
that it was practicable to run
logs down - that they could
be run after the stream
got up and when the logs
were put in it was entirely
out of the question to run
them down.

2 - You understand though
as a general proposition -
I will say as a universal
proposition that the amount

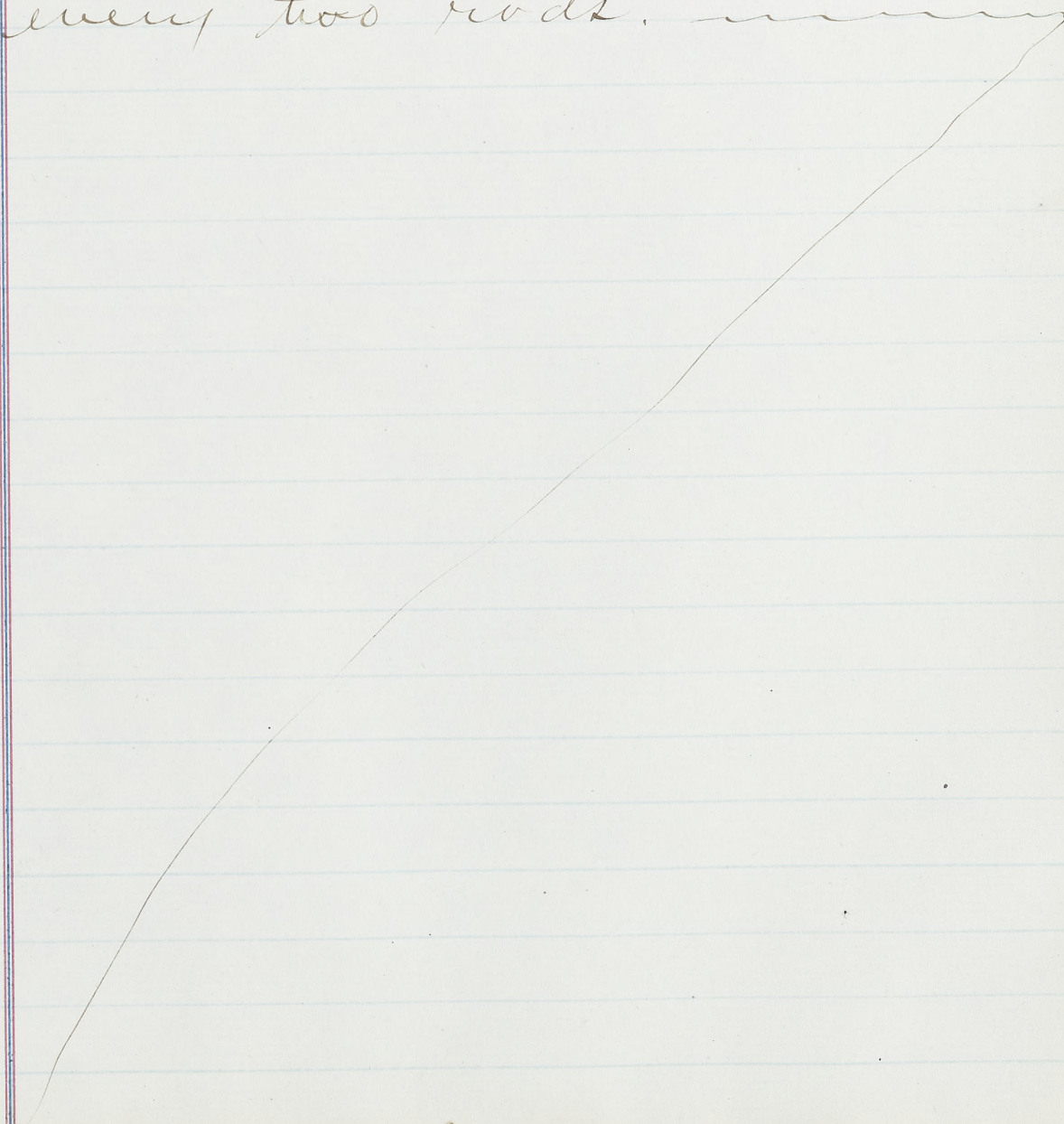
and weight of material that will be carried in a stream depends upon its velocity and the velocity of the water?

A- Yes

Q- That is a general rule?

A- Yes.

Q- Universal in its application?

A- I think so. but in those streams the velocity changes every two rods. 

2. Sometimes very rapid and
sometimes not so rapid?

A Yes.

2. You base your estimate on
at least the estimate you
were about to make, if any
upon your experience in flumes
and ditches? A and
also upon my experience in
relation to the dump of the
Excelsior Claim which is right
at Placerville - a part of it
within the City limits. The
dump has been there since
1862 and I have examined
it.

2 The Excelsior you say? A Yes.

2 Where is it located?

A It takes in a part of
Hanytown Hill and Coon Hill
right at Placerville.

2 On the South Fork?

A No sir, it is be-
tween Weaver Creek and
Hanytown Creek.

Q On the middle fork?
 A No sir it is between
 Weber Creek and Stang
 Town Creek

Q The dump there is
 in the Cañon and Chicago
 A It dumps into Weber
 Creek

Q Your estimate is
 based upon that also?

A That and other mines
 and seeing the dump
 where they flow into Weber
 Creek which during the
 flood tides will carry
 50 000 inches of water
 and more and the action
 of water upon that dump
 and the dump from the
 Loomis Claim just above
 Texas Still, the Tennessee
 Still Claim worked by
 the Park Canal Company,
 where that dump brought
 into Weber Creek the
 action of their water
 upon that dump, and
 what part of the material

goes and how far it goes
and so on, general
observation

Mr Dibble @ What per-
cent of that dense mater-
ial will go 30 miles
below the dump?

Mr Star I object to that
on the ground that the
business says that no
man can tell.

Mr Dibble @ What did
you mean by stating
that no man can tell?

@ I did not say that
no man can tell.
In the first place as
I said, no man could
tell how far the waters
of the South fork of the
American river would
carry a given sized
pebble or rock in that
stream; that these books,
the calculations in these
books are based upon
running water of a
certain pitch on a

Plane, another given surface and it won't apply at all to the rivers in El Dorado County on account of the obstructions that I have named and the bends and turns and all that

Q Do I understand you to state that experience and seeing it is better than any book knowledge on that question?

A That is my judgment

Q From your experience and knowledge of the present material, of this dense material, would pass 30 miles below the dumps?

A The early washings?

Q This refers to the present material

A From hydraulic washing?

Q The present material remaining in the mines?

A 20 per cent would not go 30 miles.

Q Will 20 per cent go 30 miles? A No sir

Q What per cent will?

A I do not believe 10 per cent will go 30 miles

Q How far are these dumps from Sacramento City?

A About 50 miles by the road and about 60 miles by the course of the streams - 70 miles perhaps by the course of the streams

Q What per cent if any per cent would go 40 miles?

A The fine and coarse sand, the vegetable mould and earthy matter would pass 40 miles perhaps

Q What per cent would you put that at of the entire matter?

Alwell I would not put it at ^{over} 5 per cent if I would that

Mr Stuart Q. 5 per cent of what?

Q of the entire tailings from any of the hydraulic mines there would not flow down the streams into which they are dumped?

Mr. Wibble Q How many stamps are used in El Dorado County?

A About 200, perhaps more.

Q How many crushing quarries? A The Lyon Company have twenty crushing gravel. If you will take the gravel from the whole then you can get the quarries; there are twenty stamps of the Lyon mine and ten of the El Dorado Deep Gravel Mining Company and ten of the Cedar mine and five of the Ames mine and ten at Greenwood that has been crushing these cement tailings

and there are ten of the Charles Main mine at Newtown that is 65 that is all of the gravel that I recollect. These are cement gravel mills that crush about 6 tons to a stamp - a ten stamp mill crushes 60 tons a day.

What is the duty of a quartz stamp?

A In gravel?

O No in quartz?

A From a ton and a quarter to a ton and a half.

What of gravel stamps?
ab to 7 tons

What number screen is used? A I think the gravel screen, it is a cut slot. I think it is No. 20. I maybe mistaken about that. In quartz it ranges from 40 to 60.

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What kind of sand

passes the screen?

A Quarry.

Q I mean is it flour sand? A You mean the quarry rock?

A Yes. A Yes sir it is flour sand.

Q What kind of wash takes place outside of the mining wash? The wash^{area} of the American river?

A There is the wash of the agricultural lands, the ploughed lands of El Dorado County; there are about 12000 or 13000 acres of land in El Dorado County, perhaps 14000 acres of that kind of land.

There is a great deal of wash from that. It is marvellous to see the wash from a side hill of ploughed land. I myself have experienced in that regard and have had for the last ten years

My recreation consists in farming and I am farming about 300 acres there in the County and the natural wash from the denuding of the hills of timber - the flows of frost, where the timber is off there is a good deal of wash from the tramping of herds of goats and herds of sheep, so much so that in the Blakely reservoir which is above the ploughed lands, the reservoir constructed by the El Dorado Water and Deep gravel Mining Company, they have what is called a pump at the bottom of their large reservoir in Blakely's ranch, I think it is 110 feet long, 8 feet wide and about 7 feet high and the water runs from the South fork of the

American river into their
 ditch at Cedar Lake
 as clear as crystal
 It comes down and the
 natural wash above
 all ploughed ground
 that settles into that
 pump, and in a month
 will nearly fill that
 pump 110 feet long, 8
 feet wide, and about
 7 feet deep, that is the
 simple wash from the
 ground along the canal
 from Cedar Lake down
 to this place which
 is about 25 miles or
 26 miles. There is in
 all of these ravines and
 along where these ditches
 have cut through the hills
 to get them level and
 running their ditches,
 they have abraded
 the ground so that
 these frosts and heavy
 rains come down and
 cause slides and there

are some portions of the
 County. I have too in
 my mind at this time
 where it runs out in the
 winter time and it has
 already run out until
 the bank is 50 or 100
 feet deep - 150 feet deep
 in one place where it
 just naturally runs
 out, it has taken the
 whole ditch out, the
 slide and they have
 the natural slide along
 these rivers and on these
 Canons; on what is called
 Big Canon which heads
 up right back of Placerville
 a Canon emptying into
 the South fork at the
 Chili Bar bridge. I
 have counted as many
 as four slides on that
 Canon, on one side of
 the Canon coming from
 Placerville down to Chili
 Bar Bridge as you go
 to Georgetown. Of course

they were small slides
 and on all these Cañons
 and ravines there are
 small slides going on
 every winter. There is one
 slide on the South fork
 as I stated before, near
 Dick's about from 4 to
 5 miles long - they vary
 from a quarter of an
 acre up to 50 acres and
 more, carrying large trees and
 rocks and then on the old dumps
 this rock exposed to the atmosphere
 for a long time would decompose
 and make what is called sand.
 On the dumps of El Dorado County
 there may be found in all the ravines
 more or less of such rock (No. 1)
 In fact all of the rock
 except the clinkers and
 the quartz and the
 feldspar rock, the harder
 material by the action
 of the atmosphere more
 or less will decompose
 and form sand and then when
 the sand is formed of course the rains come
 and that washes.

Q You refer to the dumps of old years?

A Yes sir from 1849-50-51 and 52 and so on, these old worked our mines prior to 62.

Q Illustrate the effect of the natural wash with reference to what is known as the Park Canal?

A I know the Park Canal now comprises the old Bradley and Barton ditch and the Jones Furman and Companys ditch above the Cultivated land in that ditch they cleaned out these ditches about once in four or five years, they have to clean out the ditch, which gets filled with sediment so as not to run a full head, but when you get down to the Cultivated land they have to clean them out every year and through my place I have about a mile

and a half, probably two miles of ditches the Park Canal ditch and the South Fork ditch both run through it. They each year clean it out and it is this slickens and the sediments on the lower side of the ditch is piled up there some places from 2 and 3 and 4 feet throwing it out year after year coming from the country above.

Q Any mining?

A No mining running in it at all.

Q Compare this natural wash in amount with the present mineral wash carried by the River and state result?

A From the present mining in El Dorado County?

Q That is the natural wash and the present mining wash as carried by the River and state results

A Well how long a time
I do not now recollect,
of but one hydraulic claim
being worked at this time
that is throwing its debris
in.

Q I am asking for the
aggregate, Compare the
natural wash in amount
with the present mineral
wash carried by the River
and state results in that
County.

Mr Hart He said there
is only one mine working
there.

A I do not now call to
mind but one mine -
there was more than 25
times as much.

Mr Sabbe Twenty five
times as much natural
wash as mineral wash.
A Yes Sir.

Q Is the natural wash
increasing or diminishing?
A It is increasing constantly.
Q What is the effect of

One years wash of the surface upon another years wash of the same ground. A Well it is constantly washing. the rain during heavy rains flows down and as it flows it is thick. of course it is a loose Vegetable Mold and I know I built a little dam at the lower end of one of my fields and filled it up there in one rain four five feet, I built it of brush and that washed from one little sag. As the Area of Cultivated ground increases of course the natural wash increases - in proportion as the area of Cultivated ground increases. I have valuable lands been made in Elavado County and if so how made?

A They are made by these tailings so far as it is possible for parties who have located on a ravine

where it is possible for them to save tailings, they built a brush dam and save them, and it is the best land in the County, the most productive and sought after

Q How many acres of land have been so made
A Well from a 1000 to 1200 acres perhaps more in Elavado County of this kind of land and they are constantly making it

Q Who are making it?
A The farmers those who are engaged in agricultural pursuits.

Q Average the depth of the slickens and tailings that have made these lands?
A It varies from two feet to ten feet deep.

Q Compare it with the natural lands adjacent what have been the production of the made lands. The

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A The made lands produce

What the lands adjacent
the natural lands would
not produce. You can
produce Corn and all
Kinds of vegetables from
the land made from these
tailings and it is a flat
surface and I should say
as compared with the other
land it is worth ten times
as much.

Q Compare the value of the
natural lands with the land
so made by slickens?

A I should say it is worth
ten times as much, it is
worth more than ten times
as much as a fact, I
have both kinds

Q What is the effect of the
deposit of slickens on the
red soil?

A The effect of it is to
make it more productive
it is a sort of fertilizer
after it gets ploughed up
and exposed to the atmosphere
the first year it is not so

productive but as you
work it it increases in
value and even the sands
from the rock— you crush
that rock (number one)
and make it into sand
and run it through a
gravel mill and run it
into a reservoir and after
two years you can raise a
good crop of clover upon it,
this is the character of
the rock they are crushing
up there (number one) in
the Cement mines.

Mr Harr you say Cement
makes good land?

A yes sir and Mr Lyon
who has a ranch just
below the Lyon mine at
our fairs makes his exhibit
every year and takes the
premium they produce all
kinds of vegetables, it is
the very best kind of land
there is in El Dorado County
and will produce equal to
any land here, That has

been varrified year after year.

Mr Sibble What is the effect and advantage of irrigation by slickens water?

A It is more or less a fertilizer: it is preferred to other water because it carries with it more or less vegetable mold and mineral or earthy matter and of course that is a fertilizer.

Q How does it compare in that particular with clear water?

A It is preferable.

Q By whom is it preferred?

A By parties raising clover fields and orchards those parties who irrigate these lands

Q Compare the difference between the use of the water held in mining reservoirs and ditches for mining purposes in mining with its use in the cultivation of land

as to displacement?

A There is more displacement from the water used from mining

Q Perhaps I did not make my self understood I want to ascertain from you, assuming that the miners ditches and there reserved waters are applied to Agricultural purposes instead of mining purposes what would be the difference in the amount of displacement that would occur by reason of it?

A If all of these waters were used for irrigation? do you say that if there is land enough cultivated in Eldorado County to consume all of the water for irrigating purposes how much more wash there would be.

Q Than there would be by the use of the same water in mining?

A Oh it would be vastly more.

Q Then I understand you to say that the use of it for mining purposes prevents to a great extent the immense wash that would take place?

Mr Starr I object to that on the ground that it is leading and suggestive, he did not say anything of the kind

Mr Dibble Please state your answer

A I stated that if you use all of the waters from all the canals in El Dorado County originally constructed for mining purposes and turned them to irrigating our side hills just as they are and cultivate enough so as to consume all of the water the wash from the use of this water for irrigating purposes would be vastly greater than the wash would be if used for mining purposes because it would wash off the vegetable mould. The wash would be going on during the irrigating season, Summer & Winter and they would have that in addition to the Winter wash that I have been speaking of.

< Recess until 2 o'clock >

